

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE _____ PAGE _____ OF _____ PAGES

2. AMENDMENT/MODIFICATION NO. _____ 3. EFFECTIVE DATE _____ 4. REQUISITION/PURCHASE REQ. NO. _____ 5. PROJECT NO. *(If applicable)* _____

6. ISSUED BY _____ CODE _____ 7. ADMINISTERED BY *(If other than Item 6)* _____ CODE _____

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)* _____ (X) 9A. AMENDMENT OF SOLICITATION NO. _____
 9B. DATED *(SEE ITEM 11)* _____
 10A. MODIFICATION OF CONTRACT/ORDER NO. _____
 10B. DATED *(SEE ITEM 11)* _____
 CODE _____ FACILITY CODE _____

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
 (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)* _____

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: <i>(Specify authority)</i> THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES <i>(such as changes in paying office, appropriation date, etc.)</i> SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER <i>(Specify type of modification and authority)</i>

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>	16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>
15B. CONTRACTOR/OFFEROR	16B. UNITED STATES OF AMERICA
15C. DATE SIGNED	16C. DATE SIGNED
<i>(Signature of person authorized to sign)</i>	<i>(Signature of Contracting Officer)</i>

Item 14. Continued.

CHANGES TO THE BIDDING SCHEDULE

1. Section B – Supplies or Services and Prices/Costs.- Replace this Section with the accompanying new section of the same number and title, bearing the notation "ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-03-B-0013."

Note: Changes to Bid Schedule are as follows:

- 1) Corrected title and solicitation number shown on pages.
- 2) Change "SF 1442" to read "SF 33."
- 3) Added notes to bidding schedule (pages B-41 thru B-43).

CHANGES TO THE SPECIFICATIONS

2. Replacement Sections - Replace the following section with the accompanying new section of the same number and title bearing the notation "ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-03-B-0013:"

SECTION 01421 BASIC STORM WATER POLLUTION PREVENTION PLAN
SECTION 02220 DEMOLITION
SECTION 13280A ASBESTOS ABATEMENT
SECTION 13283N REMOVAL/CONTROL AND DISPOSAL OF PAINT WITH LEAD

END OF AMENDMENT

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-03-B-0013
 BIDDING SCHEDULE
 (To be attached to **SF 33 (Am#1)**)

IDIQ Demolition/Abatement Contract (Am#1)
FORT POLK, LOUISIANA

SECTION B
SUPPLIES OR SERVICES AND PRICES/COSTS

BASE PERIOD (Date of award through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0001	GENERAL DEMOLITION				
0001AA	Demo. Wood Building (Up to and including 5,000 Square Feet (SF) of Floor Space)	120,000	SF	\$ _____	\$ _____
0001AB	Demo. Wood Building (Between 5,001 and 10,000 SF of Floor Space)	120,000	SF	\$ _____	\$ _____
0001AC	Demo. Wood Building (Greater than 10,000 SF of Floor Space)	40,000	SF	\$ _____	\$ _____
0001AD	Demo. Steel Building (Up to and Including 5,000 Square Feet (SF) of Floor Space)	10,000	SF	\$ _____	\$ _____
0001AE	Demo. Steel Building (Between 5,001 and 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0001AF	Demo. Steel Building (Greater than 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0001AG	Demo. Masonry Building (Up to and Including 5,000 Square Feet (SF) of Floor Space)	10,000	SF	\$ _____	\$ _____
0001AH	Demo. Masonry Building (Between 5,001 and 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0001AJ	Demo. Masonry Building (Greater than 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0001AK	Demo. Concrete Sidewalks, Slabs and Walls Beyond the Building Footprint (Thru 6" Thick)	5,000	SF	\$ _____	\$ _____
0001AL	Demo. Concrete Sidewalks, Slabs and Walls Beyond the Building Footprint (Greater than 6" Thick)	5,000	SF	\$ _____	\$ _____
0001AM	Demo. Concrete Curbs & Gutters (Up to and Including 18" Thick)	5,000	LF	\$ _____	\$ _____
0001AN	Construct 4-Inch Sidewalk	500	SF	\$ _____	\$ _____
0001AP	Capping Water Lines	50	EA.	\$ _____	\$ _____
0001AQ	Capping Gas Lines	50	EA.	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

BASE PERIOD (Date of award through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0001AR	Remove Asphalt Material thru 6" Thick	5,000	SF	_____	_____
0001AS	Demo. Chain-link Fence (Thru 6' Height)	100	LF	\$ _____	\$ _____
0001AT	Demo. Chain-link Fence (Greater than 6' Height)	300	LF	\$ _____	\$ _____
0001AU	Remove Concrete Wheel Stops	70	EA	\$ _____	\$ _____
0001AV	Demo. Chain-Link Gate (Thru 4' W X 6' H)	10	EA	\$ _____	\$ _____
0001AW	Demo. Chain-Link Gate (Greater than 4' W X 6' H Thru 4' W X 8' H)	10	EA	\$ _____	\$ _____
0001AX	Demo. Chain-Link Gate(Greater than 4' W X 8' H Thru 32' W X 8' H)	10	EA	\$ _____	\$ _____
0001AY	Remove Metal Culverts (Less Than 24" dia.) Includes handling, and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0001AZ	Remove Metal Culverts (24" thru 30" diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0001BA	Remove Metal Culverts (Greater than 30" thru 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0001BB	Remove Metal Culverts (Greater than 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0001BC	Remove RCP Culverts (Less than 24" dia.) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0001BD	Remove RCP Culverts (24" thru 30" diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

BASE PERIOD (Date of award through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0001BE	Remove RCP Culverts (Greater than 30" diameter thru 42" Diameter) includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0001BF	Remove RCP Culverts (Greater than 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0001BG	Remove Water Line (6" dia. or less) Includes handling, transportation, & disposal of water line, all excavation, backfilling, rough & finish grading.	1,250	LF	\$ _____	\$ _____
0001BH	Remove Water Line (Greater than 6" dia.) Includes handling, transportation, and disposal of water line, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0001BJ	Remove Gas Line (2" dia. or less) Includes handling, transportation, & disposal of gas line, all excavation, backfilling, rough & finish grading.	1,250	LF	\$ _____	\$ _____
0001BK	Remove Gas Line (Greater than 2" dia.) Includes handling, transportation, & disposal of gas line, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0001BL	Grout Sewer Line	450	CF	\$ _____	\$ _____
0001BM	Remove and Dispose of Wiring in Concrete Encased Duct Bank	1,000	LF	\$ _____	\$ _____
0001BN	Remove and Dispose of Wiring in Non-Concrete Encased Duct Bank	1,000	LF	\$ _____	\$ _____
0001BP	Remove and Dispose of Wiring Associated with Electrical Transformers Designated for Removal.	1,000	LF	\$ _____	\$ _____
0001BQ	Backfill, Satisfactory Material, for Building Areas (Includes Compaction)	10,000	CY	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

BASE PERIOD (Date of award through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0001BR	Backfill, Satisfactory Material, for All Areas of Demolished Pavement (Includes Compaction)	5,000	CY	\$ _____	\$ _____
0001BS	Topsoil: Includes Purchasing, Hauling and Placing Material	5,000	CY	_____	_____
0001BT	Seeding: Includes Fertilizer (Refer to Specs for add'l information)	50,000	SF	\$ _____	\$ _____
0001BU	Sodding: Includes Fertilizer (Refer to Specs for add'l information)	10,000	SF	\$ _____	\$ _____
0001BV	State of Louisiana Notification Fee for Building Demolition	100	EA	\$ _____	\$ _____
0001BW	3 RD Party Inspection	500	HR	\$ _____	\$ _____
0001BX	Demo. 3 Strand Barb Wire Fence	100	LF	\$ _____	\$ _____
0001BY	Construct Chain-link Fence (6' - 7' Height)	100	LF	\$ _____	\$ _____
0001BZ	Remove Aggregate Base Course thru 6" Thick	100	SF	\$ _____	\$ _____
0001CA	Remove Aggregate Base Course greater than 6" Thick	100	SF	\$ _____	\$ _____
0001CB	Remove Bollards	10	EA	\$ _____	\$ _____
0001CC	Remove Trees and Shrubs	100	EA	\$ _____	\$ _____
0001CD	Construct Scaffolding (Up to 8' height)	20	LF	\$ _____	\$ _____
0001CE	Construct Scaffolding (8' - 16' height)	20	LF	\$ _____	\$ _____
0001CF	Construct Scaffolding (Greater than 16' height)	20	LF	\$ _____	\$ _____
0001CG	Emergency Response	1	EA	\$ _____	\$ _____
0002	LEAD-BASED PAINT (LBP) ABATEMENT				
0002AA	Total Lead (Lab Analysis (ICP-AES))	50	EA	\$ _____	\$ _____
0002AB	TCLP (Toxicity Leaching Procedure)(Lead) (EPA Method 1311/6010A) and (Chlordane)(EPA Method 1311/8080)	50	EA	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

BASE PERIOD (Date of award through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0002AC	Composite Soil Sampling for Lead (Sample Collection Only)	50	EA	\$ _____	\$ _____
0002AD	Removal of Lead-Contaminated Soil	1,000	CY	\$ _____	\$ _____
0002AE	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Thru 3" W)(Does not incl. Disposal Costs)	6,000	LF	\$ _____	\$ _____
0002AF	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Greater than 3" W Thru 6"W)	3,500	LF	\$ _____	\$ _____
0002AG	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Greater than 6" W thru 12"W)	3,500	LF	\$ _____	\$ _____
0002AH	Remove Window Frame Trim Painted with LBP to Remove Asbestos Siding (Thru 3" W)(Does not incl. Disposal Costs)	1,000	LF	\$ _____	\$ _____
0002AJ	Remove Window Frame Trim Painted with LBP to Remove Asbestos Siding (Greater than 3" W thru 6"W)	3,500	LF	\$ _____	\$ _____
0002AK	Remove Interior Doors and Trim Painted with LBP(Does not incl. Disposal)	500	EA	\$ _____	\$ _____
0002AL	Remove Exterior Doors and Trim Painted with LBP (Does not incl. Disposal)	200	EA	\$ _____	\$ _____
0002AM	Remove Exterior Masonry Painted with LBP (Does not include Disposal Costs)	5,000	CF	\$ _____	\$ _____
0002AN	Removal of Metal Surface Painted with LBP	5,000	SF	\$ _____	\$ _____
0002AP	Remove Plaster Wall Painted with LBP	5,000	SF	\$ _____	\$ _____
0002AQ	Remove Plaster Ceiling Painted with LBP	5,000	SF	\$ _____	\$ _____
0002AR	Remove Ceiling Tile Painted with LBP	5,000	SF	\$ _____	\$ _____
0002AS	Transportation, Handling, and Disposal of Hazardous Waste	1,000	CY	\$ _____	\$ _____
0002AT	Transportation, Handling, and Disposal of Non-Hazardous Waste	5,000	CY	\$ _____	\$ _____
0002AU	Louisiana Department of Health Notification Fee for Lead-Based Paint Abatement	100	EA	\$ _____	\$ _____
0002AV	Industrial Hygienist Services	300	DY	\$ _____	\$ _____
0002AW	Personnel Decon	70	EA.	\$ _____	\$ _____
0002AX	Equipment Decon	70	EA.	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

BASE PERIOD (Date of award through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0002AY	Air Monitoring (Personal and Area)	100	EA	\$ _____	\$ _____
0002AZ	Full Containment Barriers (Poly-Enclosures)	20,000	SF	\$ _____	\$ _____
0002BA	Limited Containment Barriers (Poly-Enclosures)	20,000	SF	\$ _____	\$ _____
0002BB	Wipe Samples	50	EA	\$ _____	\$ _____
0003	REGULATED MATERIALS ABATEMENT				
0003AA	Removal and Handling of Fluorescent Light Ballasts (Regulated 4' Light Fixtures)	4,000	EA	\$ _____	\$ _____
0003AB	Removal and Handling of Fluorescent Light Ballasts (non-regulated)	4,000	EA	\$ _____	\$ _____
0003AC	Removal and Handling of Fluorescent Lt. Bulbs/Tubes(Regulated, 4' Light Fixtures)	5,000	EA	\$ _____	\$ _____
0003AD	Removal and Handling of Fluorescent Lt. Bulbs/Tubes(Regulated, 8' Light Fixtures)	5,000	EA	\$ _____	\$ _____
0003AE	Removal and Handling of HVAC Thermostats (Refer to Spec. 02051)	100	EA	\$ _____	\$ _____
0003AF	Removal and Handling of Lighted Exit Signs, Smoke Detectors, Emergency Lights and Rechargeable Batteries (Refer to Spec. 02051)	500	EA	\$ _____	\$ _____
0003AG	Remove and Dispose of Refrigeration Equipment Containing Ozone-Depleting Chemicals (ODCs) (Refer to Spec. 02051)	100	EA	\$ _____	\$ _____
0003AH	Remove and Dispose of Drinking Fountains (Includes Wall/Floor Mounted Units) Containing ODCs (See Spec. 02051)	200	EA	\$ _____	\$ _____
0003AJ	Remove and Dispose of Halon Fire Extinguishers (See Spec. 02051)	300	EA	\$ _____	\$ _____
0003AK	Removal and Handling of Pad Mounted PCB Transformers.	10	EA	\$ _____	\$ _____
0003AL	Removal and Handling of Pole Mounted PCB Transformers.	10	EA	\$ _____	\$ _____
0003AM	Disposal of Transformers (Non-PCB)	10	EA	\$ _____	\$ _____
0003AN	Removal, Transportation, and Disposal of Utility Poles (Creosote Treated) (Refer to Spec. 02051)	300	EA	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

BASE PERIOD (Date of award through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0003AP	Disposal of Utility Poles (Non-Regulated)	20	EA	\$ _____	\$ _____
0003AQ	Sampling and Analysis of Pole-Mounted Transformers	10	EA	\$ _____	\$ _____
0003AR	Sampling and Analysis of Pad-Mounted Transformers	10	EA	\$ _____	\$ _____
0004	ASBESTOS CONTAINING MATERIAL (ACM) ABATEMENT				
0004AA	ACM Abatement: Notification Fee per Louisiana DEQ	101	EA	\$ _____	\$ _____
0004AB	PCM Analysis	1,000	EA	\$ _____	\$ _____
0004AC	Bulk Sampling (Field Sampling Analysis)	50	EA	\$ _____	\$ _____
0004AD	PLM Analysis	20	EA	\$ _____	\$ _____
0004AE	TEM Analysis	500	EA	\$ _____	\$ _____
0004AF	Full Containment	50,000	SF	\$ _____	\$ _____
0004AG	Limited Containment	50,000	SF	\$ _____	\$ _____
0004AH	Remove Exterior Wall Vapor Barrier: Black Building Paper Behind Shingles	3,000	SF	\$ _____	\$ _____
0004AJ	Remove ACM Brick Lining for Boiler under Metal Jacket Material	150	SF	\$ _____	\$ _____
0004AK	Remove Transite Piping (Thru 12" dia.)	1,500	LF	\$ _____	\$ _____
0004AL	Remove Transite Piping (Greater than 12" dia.)	1,500	LF	\$ _____	\$ _____
0004AM	Remove Transite Water Line (8" dia. or less) Includes handling, transportation and disposal of water line, all excavation, backfilling and grading.	500	LF	\$ _____	\$ _____
0004AN	Remove Transite Water Line (Greater than 8" dia.) Includes handling, transportation and disposal of water line, all excavation, backfilling and grading.	500	LF	\$ _____	\$ _____
0004AP	Remove Abandoned Piping	25	LF	\$ _____	\$ _____
0004AQ	Remove Piping and Insulation (Thru 4" Pipe Diameter)	2,500	LF	\$ _____	\$ _____
0004AR	Remove Piping and Insulation (Greater than 4" Thru 8" Pipe Dia.)	2,500	LF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

BASE PERIOD (Date of award through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0004AS	Remove Piping and Insulation (Greater than 8" Thru 12" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0004AT	Remove Piping and Insulation (Greater than 12" Thru 16" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0004AU	Remove Pipe Insulation (Thru 4" Pipe Diameter)	2,500	LF	\$ _____	\$ _____
0004AV	Remove Pipe Insulation (Greater than 4" Thru 8" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0004AW	Remove Pipe Insulation (Greater than 8" Thru 12" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0004AX	Remove Pipe Insulation (Greater than 12" Thru 16" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0004AY	Remove Pipe Fitting Insulation (Thru 4" Pipe Diameter)	200	EA	\$ _____	\$ _____
0004AZ	Remove Pipe Fitting Insulation (Greater than 4" Thru 8" Pipe Dia.)	200	EA	\$ _____	\$ _____
0004BA	Remove Pipe Fitting Insulation (Greater than 8" Thru 12" Pipe Dia.)	200	EA	\$ _____	\$ _____
0004BB	Remove Pipe Fitting Insulation (Greater than 12" Thru 18" Pipe Dia.)	200	EA	\$ _____	\$ _____
0004BC	Remove Pipe or Fitting Insulation by Glove Bag Method	300	EA	\$ _____	\$ _____
0004BD	Remove Boiler Insulation (SF of Surface Area)	450	SF	\$ _____	\$ _____
0004BE	Remove Tank Insulation (SF of Surface Area)	250	SF	\$ _____	\$ _____
0004BF	Remove Transite Flue (SF of Surface Area)	1,200	SF	\$ _____	\$ _____
0004BG	Remove Electrical Wire - Black Wrap and Canvas Material	50	LF	\$ _____	\$ _____
0004BH	Remove Electrical System Component	5	SF	\$ _____	\$ _____
0004BJ	Remove Reflective Hardboard on Light Fixtures	5	SF	\$ _____	\$ _____
0004BK	Remove Duct Insulation Including Flex Duct and Flex Joint	2,000	SF	\$ _____	\$ _____
0004BL	Remove Exterior Wall Insulated Batts	75	SF	\$ _____	\$ _____
0004BM	Remove Wall Mastic	400	SF	\$ _____	\$ _____
0004BN	Remove Ceiling Mastic	1,000	SF	\$ _____	\$ _____
0004BP	Remove Acoustical Ceiling Tile and Grid	700	SF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

BASE PERIOD (Date of award through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0004BQ	Remove Glued-on Wall/Ceiling Tile	800	SF	\$ _____	\$ _____
0004BR	Remove 1/4" Paperboard Panels Attached to Wall	150	SF	\$ _____	\$ _____
0004BS	Remove 1/4" Paperboard Panels Attached to Ceiling	100	SF	\$ _____	\$ _____
0004BT	Remove Wall Transite (Interior/Exterior)	1,500	SF	\$ _____	\$ _____
0004BU	Remove Ceiling Transite	1,300	SF	\$ _____	\$ _____
0004BV	Remove Non-Specific Coating on Plywood Walls	500	SF	\$ _____	\$ _____
0004BW	Remove Vinyl Composition Tile Flooring including Adhesive Mastic	50,000	SF	\$ _____	\$ _____
0004BX	Remove Vinyl Composition Sheet Flooring including Adhesive Mastic	5,000	SF	\$ _____	\$ _____
0004BY	Remove ACM Sheetrock - Walls (Unpaneled or Without Wainscot)	5,000	SF	\$ _____	\$ _____
0004BZ	Remove ACM Sheetrock - Walls (Paneled or With Wainscot)	5,000	SF	\$ _____	\$ _____
0004CA	Remove ACM Sheetrock - Ceilings	5,000	SF	\$ _____	\$ _____
0004CB	Remove ACM Wall Plaster (Under Ceramic Tile)	1,000	SF	\$ _____	\$ _____
0004CC	Remove ACM Ceiling Plaster (Under Ceramic Tile)	1,500	SF	\$ _____	\$ _____
0004CD	Remove Friable ACM Ceiling Tile	1,500	SF	\$ _____	\$ _____
0004CE	Remove Sprayed-On Friable ACM (Thru 2" Thick)	1,000	SF	\$ _____	\$ _____
0004CF	Remove Non-Friable ACM Concrete (Thru 10' High)	1,000	SF	\$ _____	\$ _____
0004CG	Remove Friable ACM Shingled Roof (Thru 15' High Eave)	1,500	SF	\$ _____	\$ _____
0004CH	Remove Friable ACM Shingled Roof (Thru 30' Eave Height)	1,000	SF	\$ _____	\$ _____
0004CJ	Remove Non-Friable ACM Shingled Roof (Thru 15' High Eave)	1,500	SF	\$ _____	\$ _____
0004CK	Remove Non-Friable ACM Shingled Roof (Thru 30' Eave Height)	1,000	SF	\$ _____	\$ _____
0004CL	Remove ACM Built-Up Roof (Thru 15' High Eave)	10,000	SF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

BASE PERIOD (Date of award through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0004CM	Remove ACM Built-Up Roof (Thru 30' Eave Height)	5,000	SF	\$ _____	\$ _____
0004CN	Remove Friable ACM Roll Roofing (Thru 15' High Eave)	100	SF	\$ _____	\$ _____
0004CP	Remove Friable ACM Roll Roofing (Thru 30' Eave Height)	100	SF	\$ _____	\$ _____
0004CQ	Remove Non-Friable ACM Roll Roofing (Thru 20' High Eave)	100	SF	\$ _____	\$ _____
0004CR	Remove ACM Debris Not Associated with Other Abatement	100	SF	\$ _____	\$ _____
0004CS	Removal of Asbestos Contaminated Soil	1,000	CY	\$ _____	\$ _____
0004CT	Transportation, Handling, & Disposal of ACM (One way. No additional payment for return trip or for delivery of containers to the job site).	10,000	CY	\$ _____	\$ _____
0004CU	Encapsulation (Lockdown)	50,000	SF	\$ _____	\$ _____
0004CV	Removal of Oxychloride Flooring	10,000	SF	\$ _____	\$ _____
0004CW	Industrial Hygienist Services	300	DY	\$ _____	\$ _____
0004CX	Personnel Decon	70	EA.	\$ _____	\$ _____
0004CY	Equipment Decon	70	EA.	\$ _____	\$ _____
0005	Bond Cost (per \$1,000)	1,000	K	\$ _____	\$ _____
	TOTAL BASE PERIOD (ITEMS 0001 THRU 0005)			\$ _____	

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-03-B-0013
 BIDDING SCHEDULE
 (To be attached to **SF 33 (Am#1)**)

OPTION PERIOD ONE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0006	GENERAL DEMOLITION				
0006AA	Demo. Wood Building (Up to and including 5,000 Square Feet (SF) of Floor Space)	120,000	SF	\$ _____	\$ _____
0006AB	Demo. Wood Building (Between 5,001 and 10,000 SF of Floor Space)	120,000	SF	\$ _____	\$ _____
0006AC	Demo. Wood Building (Greater than 10,000 SF of Floor Space)	40,000	SF	\$ _____	\$ _____
0006AD	Demo. Steel Building (Up to and Including 5,000 Square Feet (SF) of Floor Space)	10,000	SF	\$ _____	\$ _____
0006AE	Demo. Steel Building (Between 5,001 and 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0006AF	Demo. Steel Building (Greater than 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0006AG	Demo. Masonry Building (Up to and Including 5,000 Square Feet (SF) of Floor Space)	10,000	SF	\$ _____	\$ _____
0006AH	Demo. Masonry Building (Between 5,001 and 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0006AJ	Demo. Masonry Building (Greater than 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0006AK	Demo. Concrete Sidewalks, Slabs and Walls Beyond the Building Footprint (Thru 6" Thick)	5,000	SF	\$ _____	\$ _____
0006AL	Demo. Concrete Sidewalks, Slabs and Walls Beyond the Building Footprint (Greater than 6" Thick)	5,000	SF	\$ _____	\$ _____
0006AM	Demo. Concrete Curbs & Gutters (Up to and Including 18" Thick)	5,000	LF	\$ _____	\$ _____
0006AN	Construct 4-Inch Sidewalk	500	SF	\$ _____	\$ _____
0006AP	Capping Water Lines	50	EA.	\$ _____	\$ _____
0006AQ	Capping Gas Lines	50	EA.	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD ONE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0006AR	Remove Asphalt Material thru 6" Thick	5,000	SF	\$ _____	\$ _____
0006AS	Demo. Chain-link Fence (Thru 6' Height)	100	LF	\$ _____	\$ _____
0006AT	Demo. Chain-link Fence (Greater than 6' Height)	300	LF	\$ _____	\$ _____
0006AU	Remove Concrete Wheel Stops	70	EA	\$ _____	\$ _____
0006AV	Demo. Chain-Link Gate (Thru 4' W X 6' H)	10	EA	\$ _____	\$ _____
0006AW	Demo. Chain-Link Gate (Greater than 4' W X 6' H Thru 4' W X 8' H)	10	EA	\$ _____	\$ _____
0006AX	Demo. Chain-Link Gate(Greater than 4' W X 8' H Thru 32' W X 8' H)	10	EA	\$ _____	\$ _____
0006AY	Remove Metal Culverts (Less Than 24" dia.) Includes handling, and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0006AZ	Remove Metal Culverts (24" thru 30" diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0006BA	Remove Metal Culverts (Greater than 30" thru 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0006BB	Remove Metal Culverts (Greater than 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0006BC	Remove RCP Culverts (Less than 24" dia.) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0006BD	Remove RCP Culverts (24" thru 30" diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD ONE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0006BE	Remove RCP Culverts (Greater than 30" diameter thru 42" Diameter) includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0006BF	Remove RCP Culverts (Greater than 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0006BG	Remove Water Line (6" dia. or less) Includes handling, transportation, & disposal of water line, all excavation, backfilling, rough & finish grading.	1,250	LF	\$ _____	\$ _____
0006BH	Remove Water Line (Greater than 6" dia.) Includes handling, transportation, and disposal of water line, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0006BJ	Remove Gas Line (2" dia. or less) Includes handling, transportation, & disposal of gas line, all excavation, backfilling, rough & finish grading.	1,250	LF	\$ _____	\$ _____
0006BK	Remove Gas Line (Greater than 2" dia.) Includes handling, transportation, & disposal of gas line, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0006BL	Grout Sewer Line	450	CF	\$ _____	\$ _____
0006BM	Remove and Dispose of Wiring in Concrete Encased Duct Bank	1,000	LF	\$ _____	\$ _____
0006BN	Remove and Dispose of Wiring in Non-Concrete Encased Duct Bank	1,000	LF	\$ _____	\$ _____
0006BP	Remove and Dispose of Wiring Associated with Electrical Transformers Designated for Removal.	1,000	LF	\$ _____	\$ _____
0006BQ	Backfill, Satisfactory Material, for Building Areas (Includes Compaction)	10,000	CY	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD ONE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0006BR	Backfill, Satisfactory Material, for All Areas of Demolished Pavement (Includes Compaction)	5,000	CY	\$ _____	\$ _____
0006BS	Topsoil: Includes Purchasing, Hauling and Placing Material	5,000	CY	\$ _____	\$ _____
0006BT	Seeding: Includes Fertilizer (Refer to Specs for add'l information)	50,000	SF	\$ _____	\$ _____
0006BU	Sodding: Includes Fertilizer (Refer to Specs for add'l information)	10,000	SF	\$ _____	\$ _____
0006BV	State of Louisiana Notification Fee for Building Demolition	100	EA	\$ _____	\$ _____
0006BW	3 RD Party Inspection	500	HR	\$ _____	\$ _____
0006BX	Demo. 3 Strand Barb Wire Fence	100	LF	\$ _____	\$ _____
0006BY	Construct Chain-link Fence (6' - 7' Height)	100	LF	\$ _____	\$ _____
0006BZ	Remove Aggregate Base Course thru 6" Thick	100	SF	\$ _____	\$ _____
0006CA	Remove Aggregate Base Course greater than 6" Thick	100	SF	\$ _____	\$ _____
0006CB	Remove Bollards	10	EA	\$ _____	\$ _____
0006CC	Remove Trees and Shrubs	100	EA	\$ _____	\$ _____
0006CD	Construct Scaffolding (Up to 8' height)	20	LF	\$ _____	\$ _____
0006CE	Construct Scaffolding (8' - 16' height)	20	LF	\$ _____	\$ _____
0006CF	Construct Scaffolding (Greater than 16' height)	20	LF	\$ _____	\$ _____
0006CG	Emergency Response	1	EA	\$ _____	\$ _____
0007	LEAD-BASED PAINT (LBP) ABATEMENT				
0007AA	Total Lead (Lab Analysis (ICP-AES))	50	EA	\$ _____	\$ _____
0007AB	TCLP (Toxicity Leaching Procedure)(Lead) (EPA Method 1311/6010A) and (Chlordane)(EPA Method 1311/8080)	50	EA	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD ONE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0007AC	Composite Soil Sampling for Lead (Sample Collection Only)	50	EA	\$ _____	\$ _____
0007AD	Removal of Lead-Contaminated Soil	1,000	CY	\$ _____	\$ _____
0007AE	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Thru 3" W)(Does not incl. Disposal Costs)	6,000	LF	\$ _____	\$ _____
0007AF	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Greater than 3" W Thru 6"W)	3,500	LF	\$ _____	\$ _____
0007AG	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Greater than 6" W thru 12"W)	3,500	LF	\$ _____	\$ _____
0007AH	Remove Window Frame Trim Painted with LBP to Remove Asbestos Siding (Thru 3" W)(Does not incl. Disposal Costs)	1,000	LF	\$ _____	\$ _____
0007AJ	Remove Window Frame Trim Painted with LBP to Remove Asbestos Siding (Greater than 3" W thru 6"W)	3,500	LF	\$ _____	\$ _____
0007AK	Remove Interior Doors and Trim Painted with LBP(Does not incl. Disposal)	500	EA	\$ _____	\$ _____
0007AL	Remove Exterior Doors and Trim Painted with LBP (Does not incl. Disposal)	200	EA	\$ _____	\$ _____
0007AM	Remove Exterior Masonry Painted with LBP (Does not include Disposal Costs)	5,000	CF	\$ _____	\$ _____
0007AN	Removal of Metal Surface Painted with LBP	5,000	SF	\$ _____	\$ _____
0007AP	Remove Plaster Wall Painted with LBP	5,000	SF	\$ _____	\$ _____
0007AQ	Remove Plaster Ceiling Painted with LBP	5,000	SF	\$ _____	\$ _____
0007AR	Remove Ceiling Tile Painted with LBP	5,000	SF	\$ _____	\$ _____
0007AS	Transportation, Handling, and Disposal of Hazardous Waste	1,000	CY	\$ _____	\$ _____
0007AT	Transportation, Handling, and Disposal of Non-Hazardous Waste	5,000	CY	\$ _____	\$ _____
0007AU	Louisiana Department of Health Notification Fee for Lead-Based Paint Abatement	100	EA	\$ _____	\$ _____
0007AV	Industrial Hygienist Services	300	DY	\$ _____	\$ _____
0007AW	Personnel Decon	70	EA.	\$ _____	\$ _____
0007AX	Equipment Decon	70	EA.	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD ONE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0007AY	Air Monitoring (Personal and Area)	100	EA	\$ _____	\$ _____
0007AZ	Full Containment Barriers (Poly-Enclosures)	20,000	SF	\$ _____	\$ _____
0007BA	Limited Containment Barriers (Poly-Enclosures)	20,000	SF	\$ _____	\$ _____
0007BB	Wipe Samples	50	EA	\$ _____	\$ _____
0008	REGULATED MATERIALS ABATEMENT				
0008AA	Removal and Handling of Fluorescent Light Ballasts (Regulated 4' Light Fixtures)	4,000	EA	\$ _____	\$ _____
0008AB	Removal and Handling of Fluorescent Light Ballasts (non-regulated)	4,000	EA	\$ _____	\$ _____
0008AC	Removal and Handling of Fluorescent Lt. Bulbs/Tubes(Regulated, 4' Light Fixtures)	5,000	EA	\$ _____	\$ _____
0008AD	Removal and Handling of Fluorescent Lt. Bulbs/Tubes(Regulated, 8' Light Fixtures)	5,000	EA	\$ _____	\$ _____
0008AE	Removal and Handling of HVAC Thermostats (Refer to Spec. 02051)	100	EA	\$ _____	\$ _____
0008AF	Removal and Handling of Lighted Exit Signs, Smoke Detectors, Emergency Lights and Rechargeable Batteries (Refer to Spec. 02051)	500	EA	\$ _____	\$ _____
0008AG	Remove and Dispose of Refrigeration Equipment Containing Ozone-Depleting Chemicals (ODCs) (Refer to Spec. 02051)	100	EA	\$ _____	\$ _____
0008AH	Remove and Dispose of Drinking Fountains (Includes Wall/Floor Mounted Units) Containing ODCs (See Spec. 02051)	200	EA	\$ _____	\$ _____
0008AJ	Remove and Dispose of Halon Fire Extinguishers (See Spec. 02051)	300	EA	\$ _____	\$ _____
0008AK	Removal and Handling of Pad Mounted PCB Transformers.	10	EA	\$ _____	\$ _____
0008AL	Removal and Handling of Pole Mounted PCB Transformers.	10	EA	\$ _____	\$ _____
0008AM	Disposal of Transformers (Non-PCB)	10	EA	\$ _____	\$ _____
0008AN	Removal, Transportation, and Disposal of Utility Poles (Creosote Treated) (Refer to Spec. 02051)	300	EA	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD ONE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0008AP	Disposal of Utility Poles (Non-Regulated)	20	EA	\$ _____	\$ _____
0008AQ	Sampling and Analysis of Pole-Mounted Transformers	10	EA	\$ _____	\$ _____
0008AR	Sampling and Analysis of Pad-Mounted Transformers	10	EA	\$ _____	\$ _____
0009	ASBESTOS CONTAINING MATERIAL (ACM) ABATEMENT				
0009AA	ACM Abatement: Notification Fee per Louisiana DEQ	101	EA	\$ _____	\$ _____
0009AB	PCM Analysis	1,000	EA	\$ _____	\$ _____
0009AC	Bulk Sampling (Field Sampling Analysis)	50	EA	\$ _____	\$ _____
0009AD	PLM Analysis	20	EA	\$ _____	\$ _____
0009AE	TEM Analysis	500	EA	\$ _____	\$ _____
0009AF	Full Containment	50,000	SF	\$ _____	\$ _____
0009AG	Limited Containment	50,000	SF	\$ _____	\$ _____
0009AH	Remove Exterior Wall Vapor Barrier: Black Building Paper Behind Shingles	3,000	SF	\$ _____	\$ _____
0009AJ	Remove ACM Brick Lining for Boiler under Metal Jacket Material	150	SF	\$ _____	\$ _____
0009AK	Remove Transite Piping (Thru 12" dia.)	1,500	LF	\$ _____	\$ _____
0009AL	Remove Transite Piping (Greater than 12" dia.)	1,500	LF	\$ _____	\$ _____
0009AM	Remove Transite Water Line (8" dia. or less) Includes handling, transportation and disposal of water line, all excavation, backfilling and grading.	500	LF	\$ _____	\$ _____
0009AN	Remove Transite Water Line (Greater than 8" dia.) Includes handling, transportation and disposal of water line, all excavation, backfilling and grading.	500	LF	\$ _____	\$ _____
0009AP	Remove Abandoned Piping	25	LF	\$ _____	\$ _____
0009AQ	Remove Piping and Insulation (Thru 4" Pipe Diameter)	2,500	LF	\$ _____	\$ _____
0009AR	Remove Piping and Insulation (Greater than 4" Thru 8" Pipe Dia.)	2,500	LF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD ONE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0009AS	Remove Piping and Insulation (Greater than 8" Thru 12" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0009AT	Remove Piping and Insulation (Greater than 12" Thru 16" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0009AU	Remove Pipe Insulation (Thru 4" Pipe Diameter)	2,500	LF	\$ _____	\$ _____
0009AV	Remove Pipe Insulation (Greater than 4" Thru 8" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0009AW	Remove Pipe Insulation (Greater than 8" Thru 12" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0009AX	Remove Pipe Insulation (Greater than 12" Thru 16" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0009AY	Remove Pipe Fitting Insulation (Thru 4" Pipe Diameter)	200	EA	\$ _____	\$ _____
0009AZ	Remove Pipe Fitting Insulation (Greater than 4" Thru 8" Pipe Dia.)	200	EA	\$ _____	\$ _____
0009BA	Remove Pipe Fitting Insulation (Greater than 8" Thru 12" Pipe Dia.)	200	EA	\$ _____	\$ _____
0009BB	Remove Pipe Fitting Insulation (Greater than 12" Thru 18" Pipe Dia.)	200	EA	\$ _____	\$ _____
0009BC	Remove Pipe or Fitting Insulation by Glove Bag Method	300	EA	\$ _____	\$ _____
0009BD	Remove Boiler Insulation (SF of Surface Area)	450	SF	\$ _____	\$ _____
0009BE	Remove Tank Insulation (SF of Surface Area)	250	SF	\$ _____	\$ _____
0009BF	Remove Transite Flue (SF of Surface Area)	1,200	SF	\$ _____	\$ _____
0009BG	Remove Electrical Wire - Black Wrap and Canvas Material	50	LF	\$ _____	\$ _____
0009BH	Remove Electrical System Component	5	SF	\$ _____	\$ _____
0009BJ	Remove Reflective Hardboard on Light Fixtures	5	SF	\$ _____	\$ _____
0009BK	Remove Duct Insulation Including Flex Duct and Flex Joint	2,000	SF	\$ _____	\$ _____
0009BL	Remove Exterior Wall Insulated Batts	75	SF	\$ _____	\$ _____
0009BM	Remove Wall Mastic	400	SF	\$ _____	\$ _____
0009BN	Remove Ceiling Mastic	1,000	SF	\$ _____	\$ _____
0009BP	Remove Acoustical Ceiling Tile and Grid	700	SF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD ONE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0009BQ	Remove Glued-on Wall/Ceiling Tile	800	SF	\$ _____	\$ _____
0009BR	Remove 1/4" Paperboard Panels Attached to Wall	150	SF	\$ _____	\$ _____
0009BS	Remove 1/4" Paperboard Panels Attached to Ceiling	100	SF	\$ _____	\$ _____
0009BT	Remove Wall Transite (Interior/Exterior)	1,500	SF	\$ _____	\$ _____
0009BU	Remove Ceiling Transite	1,300	SF	\$ _____	\$ _____
0009BV	Remove Non-Specific Coating on Plywood Walls	500	SF	\$ _____	\$ _____
0009BW	Remove Vinyl Composition Tile Flooring including Adhesive Mastic	50,000	SF	\$ _____	\$ _____
0009BX	Remove Vinyl Composition Sheet Flooring including Adhesive Mastic	5,000	SF	\$ _____	\$ _____
0009BY	Remove ACM Sheetrock - Walls (Unpaneled or Without Wainscot)	5,000	SF	\$ _____	\$ _____
0009BZ	Remove ACM Sheetrock - Walls (Paneled or With Wainscot)	5,000	SF	\$ _____	\$ _____
0009CA	Remove ACM Sheetrock - Ceilings	5,000	SF	\$ _____	\$ _____
0009CB	Remove ACM Wall Plaster (Under Ceramic Tile)	1,000	SF	\$ _____	\$ _____
0009CC	Remove ACM Ceiling Plaster (Under Ceramic Tile)	1,500	SF	\$ _____	\$ _____
0009CD	Remove Friable ACM Ceiling Tile	1,500	SF	\$ _____	\$ _____
0009CE	Remove Sprayed-On Friable ACM (Thru 2" Thick)	1,000	SF	\$ _____	\$ _____
0009CF	Remove Non-Friable ACM Concrete (Thru 10' High)	1,000	SF	\$ _____	\$ _____
0009CG	Remove Friable ACM Shingled Roof (Thru 15' High Eave)	1,500	SF	\$ _____	\$ _____
0009CH	Remove Friable ACM Shingled Roof (Thru 30' Eave Height)	1,000	SF	\$ _____	\$ _____
0009CJ	Remove Non-Friable ACM Shingled Roof (Thru 15' High Eave)	1,500	SF	\$ _____	\$ _____
0009CK	Remove Non-Friable ACM Shingled Roof (Thru 30' Eave Height)	1,000	SF	\$ _____	\$ _____
0009CL	Remove ACM Built-Up Roof (Thru 15' High Eave)	10,000	SF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD ONE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0009CM	Remove ACM Built-Up Roof (Thru 30' Eave Height)	5,000	SF	\$ _____	\$ _____
0009CN	Remove Friable ACM Roll Roofing (Thru 15' High Eave)	100	SF	\$ _____	\$ _____
0009CP	Remove Friable ACM Roll Roofing (Thru 30' Eave Height)	100	SF	\$ _____	\$ _____
0009CQ	Remove Non-Friable ACM Roll Roofing (Thru 20' High Eave)	100	SF	\$ _____	\$ _____
0009CR	Remove ACM Debris Not Associated with Other Abatement	100	SF	\$ _____	\$ _____
0009CS	Removal of Asbestos Contaminated Soil	1,000	CY	\$ _____	\$ _____
0009CT	Transportation, Handling, & Disposal of ACM (One way. No additional payment for return trip or for delivery of containers to the job site).	10,000	CY	\$ _____	\$ _____
0009CU	Encapsulation (Lockdown)	50,000	SF	\$ _____	\$ _____
0009CV	Removal of Oxychloride Flooring	10,000	SF	\$ _____	\$ _____
0009CW	Industrial Hygienist Services	300	DY	\$ _____	\$ _____
0009CX	Personnel Decon	70	EA.	\$ _____	\$ _____
0009CY	Equipment Decon	70	EA.	\$ _____	\$ _____
0010	Bond Cost (per \$1,000)	1,000	K	\$ _____	\$ _____
TOTAL OPTION PERIOD ONE (ITEMS 0006 THRU 0010)				\$ _____	

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD TWO (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0011	GENERAL DEMOLITION				
0011AA	Demo. Wood Building (Up to and including 5,000 Square Feet (SF) of Floor Space)	120,000	SF	\$ _____	\$ _____
0011AB	Demo. Wood Building (Between 5,001 and 10,000 SF of Floor Space)	120,000	SF	\$ _____	\$ _____
0011AC	Demo. Wood Building (Greater than 10,000 SF of Floor Space)	40,000	SF	\$ _____	\$ _____
0011AD	Demo. Steel Building (Up to and Including 5,000 Square Feet (SF) of Floor Space)	10,000	SF	\$ _____	\$ _____
0011AE	Demo. Steel Building (Between 5,001 and 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0011AF	Demo. Steel Building (Greater than 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0011AG	Demo. Masonry Building (Up to and Including 5,000 Square Feet (SF) of Floor Space)	10,000	SF	\$ _____	\$ _____
0011AH	Demo. Masonry Building (Between 5,001 and 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0011AJ	Demo. Masonry Building (Greater than 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0011AK	Demo. Concrete Sidewalks, Slabs and Walls Beyond the Building Footprint (Thru 6" Thick)	5,000	SF	\$ _____	\$ _____
0011AL	Demo. Concrete Sidewalks, Slabs and Walls Beyond the Building Footprint (Greater than 6" Thick)	5,000	SF	\$ _____	\$ _____
0011AM	Demo. Concrete Curbs & Gutters (Up to and Including 18" Thick)	5,000	LF	\$ _____	\$ _____
0011AN	Construct 4-Inch Sidewalk	500	SF	\$ _____	\$ _____
0011AP	Capping Water Lines	50	EA.	\$ _____	\$ _____
0011AQ	Capping Gas Lines	50	EA.	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD TWO (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0011AR	Remove Asphalt Material thru 6" Thick	5,000	SF	\$ _____	\$ _____
0011AS	Demo. Chain-link Fence (Thru 6' Height)	100	LF	\$ _____	\$ _____
0011AT	Demo. Chain-link Fence (Greater than 6' Height)	300	LF	\$ _____	\$ _____
0011AU	Remove Concrete Wheel Stops	70	EA	\$ _____	\$ _____
0011AV	Demo. Chain-Link Gate (Thru 4' W X 6' H)	10	EA	\$ _____	\$ _____
0011AW	Demo. Chain-Link Gate (Greater than 4' W X 6' H Thru 4' W X 8' H)	10	EA	\$ _____	\$ _____
0011AX	Demo. Chain-Link Gate(Greater than 4' W X 8' H Thru 32' W X 8' H)	10	EA	\$ _____	\$ _____
0011AY	Remove Metal Culverts (Less Than 24" dia.) Includes handling, and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0011AZ	Remove Metal Culverts (24" thru 30" diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0011BA	Remove Metal Culverts (Greater than 30" thru 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0011BB	Remove Metal Culverts (Greater than 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0011BC	Remove RCP Culverts (Less than 24" dia.) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0011BD	Remove RCP Culverts (24" thru 30" diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD TWO (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0011BE	Remove RCP Culverts (Greater than 30" diameter thru 42" Diameter) includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0011BF	Remove RCP Culverts (Greater than 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0011BG	Remove Water Line (6" dia. or less) Includes handling, transportation, & disposal of water line, all excavation, backfilling, rough & finish grading.	1,250	LF	\$ _____	\$ _____
0011BH	Remove Water Line (Greater than 6" dia.) Includes handling, transportation, and disposal of water line, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0011BJ	Remove Gas Line (2" dia. or less) Includes handling, transportation, & disposal of gas line, all excavation, backfilling, rough & finish grading.	1,250	LF	\$ _____	\$ _____
0011BK	Remove Gas Line (Greater than 2" dia.) Includes handling, transportation, & disposal of gas line, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0011BL	Grout Sewer Line	450	CF	\$ _____	\$ _____
0011BM	Remove and Dispose of Wiring in Concrete Encased Duct Bank	1,000	LF	\$ _____	\$ _____
0011BN	Remove and Dispose of Wiring in Non-Concrete Encased Duct Bank	1,000	LF	\$ _____	\$ _____
0011BP	Remove and Dispose of Wiring Associated with Electrical Transformers Designated for Removal.	1,000	LF	\$ _____	\$ _____
0011BQ	Backfill, Satisfactory Material, for Building Areas (Includes Compaction)	10,000	CY	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD TWO (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0011BR	Backfill, Satisfactory Material, for All Areas of Demolished Pavement (Includes Compaction)	5,000	CY	\$ _____	\$ _____
0011BS	Topsoil: Includes Purchasing, Hauling and Placing Material	5,000	CY	\$ _____	\$ _____
0011BT	Seeding: Includes Fertilizer (Refer to Specs for add'l information)	50,000	SF	\$ _____	\$ _____
0011BU	Sodding: Includes Fertilizer (Refer to Specs for add'l information)	10,000	SF	\$ _____	\$ _____
0011BV	State of Louisiana Notification Fee for Building Demolition	100	EA	\$ _____	\$ _____
0011BW	3 RD Party Inspection	500	HR	\$ _____	\$ _____
0011BX	Demo. 3 Strand Barb Wire Fence	100	LF	\$ _____	\$ _____
0011BY	Construct Chain-link Fence (6' - 7' Height)	100	LF	\$ _____	\$ _____
0011BZ	Remove Aggregate Base Course thru 6" Thick	100	SF	\$ _____	\$ _____
0011CA	Remove Aggregate Base Course greater than 6" Thick	100	SF	\$ _____	\$ _____
0011CB	Remove Bollards	10	EA	\$ _____	\$ _____
0011CC	Remove Trees and Shrubs	100	EA	\$ _____	\$ _____
0011CD	Construct Scaffolding (Up to 8' height)	20	LF	\$ _____	\$ _____
0011CE	Construct Scaffolding (8' - 16' height)	20	LF	\$ _____	\$ _____
0011CF	Construct Scaffolding (Greater than 16' height)	20	LF	\$ _____	\$ _____
0011CG	Emergency Response	1	EA	\$ _____	\$ _____
0012	LEAD-BASED PAINT (LBP) ABATEMENT				
0012AA	Total Lead (Lab Analysis (ICP-AES))	50	EA	\$ _____	\$ _____
0012AB	TCLP (Toxicity Leaching Procedure)(Lead) (EPA Method 1311/6010A) and (Chlordane)(EPA Method 1311/8080)	50	EA	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD TWO (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0012AC	Composite Soil Sampling for Lead (Sample Collection Only)	50	EA	\$ _____	\$ _____
0012AD	Removal of Lead-Contaminated Soil	1,000	CY	\$ _____	\$ _____
0012AE	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Thru 3" W)(Does not incl. Disposal Costs)	6,000	LF	\$ _____	\$ _____
0012AF	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Greater than 3" W Thru 6"W)	3,500	LF	\$ _____	\$ _____
0012AG	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Greater than 6" W thru 12"W)	3,500	LF	\$ _____	\$ _____
0012AH	Remove Window Frame Trim Painted with LBP to Remove Asbestos Siding (Thru 3" W)(Does not incl. Disposal Costs)	1,000	LF	\$ _____	\$ _____
0012AJ	Remove Window Frame Trim Painted with LBP to Remove Asbestos Siding (Greater than 3" W thru 6"W)	3,500	LF	\$ _____	\$ _____
0012AK	Remove Interior Doors and Trim Painted with LBP(Does not incl. Disposal)	500	EA	\$ _____	\$ _____
0012AL	Remove Exterior Doors and Trim Painted with LBP (Does not incl. Disposal)	200	EA	\$ _____	\$ _____
0012AM	Remove Exterior Masonry Painted with LBP (Does not include Disposal Costs)	5,000	CF	\$ _____	\$ _____
0012AN	Removal of Metal Surface Painted with LBP	5,000	SF	\$ _____	\$ _____
0012AP	Remove Plaster Wall Painted with LBP	5,000	SF	\$ _____	\$ _____
0012AQ	Remove Plaster Ceiling Painted with LBP	5,000	SF	\$ _____	\$ _____
0012AR	Remove Ceiling Tile Painted with LBP	5,000	SF	\$ _____	\$ _____
0012AS	Transportation, Handling, and Disposal of Hazardous Waste	1,000	CY	\$ _____	\$ _____
0012AT	Transportation, Handling, and Disposal of Non-Hazardous Waste	5,000	CY	\$ _____	\$ _____
0012AU	Louisiana Department of Health Notification Fee for Lead-Based Paint Abatement	100	EA	\$ _____	\$ _____
0012AV	Industrial Hygienist Services	300	DY	\$ _____	\$ _____
0012AW	Personnel Decon	70	EA.	\$ _____	\$ _____
0012AX	Equipment Decon	70	EA.	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD TWO (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0012AY	Air Monitoring (Personal and Area)	100	EA	\$ _____	\$ _____
0012AZ	Full Containment Barriers (Poly-Enclosures)	20,000	SF	\$ _____	\$ _____
0012BA	Limited Containment Barriers (Poly-Enclosures)	20,000	SF	\$ _____	\$ _____
0012BB	Wipe Samples	50	EA	\$ _____	\$ _____
0013	REGULATED MATERIALS ABATEMENT				
0013AA	Removal and Handling of Fluorescent Light Ballasts (Regulated 4' Light Fixtures)	4,000	EA	\$ _____	\$ _____
0013AB	Removal and Handling of Fluorescent Light Ballasts (non-regulated)	4,000	EA	\$ _____	\$ _____
0013AC	Removal and Handling of Fluorescent Lt. Bulbs/Tubes(Regulated, 4' Light Fixtures)	5,000	EA	\$ _____	\$ _____
0013AD	Removal and Handling of Fluorescent Lt. Bulbs/Tubes(Regulated, 8' Light Fixtures)	5,000	EA	\$ _____	\$ _____
0013AE	Removal and Handling of HVAC Thermostats (Refer to Spec. 02051)	100	EA	\$ _____	\$ _____
0013AF	Removal and Handling of Lighted Exit Signs, Smoke Detectors, Emergency Lights and Rechargeable Batteries (Refer to Spec. 02051)	500	EA	\$ _____	\$ _____
0013AG	Remove and Dispose of Refrigeration Equipment Containing Ozone-Depleting Chemicals (ODCs) (Refer to Spec. 02051)	100	EA	\$ _____	\$ _____
0013AH	Remove and Dispose of Drinking Fountains (Includes Wall/Floor Mounted Units) Containing ODCs (See Spec. 02051)	200	EA	\$ _____	\$ _____
0013AJ	Remove and Dispose of Halon Fire Extinguishers (See Spec. 02051)	300	EA	\$ _____	\$ _____
0013AK	Removal and Handling of Pad Mounted PCB Transformers.	10	EA	\$ _____	\$ _____
0013AL	Removal and Handling of Pole Mounted PCB Transformers.	10	EA	\$ _____	\$ _____
0013AM	Disposal of Transformers (Non-PCB)	10	EA	\$ _____	\$ _____
0013AN	Removal, Transportation, and Disposal of Utility Poles (Creosote Treated) (Refer to Spec. 02051)	300	EA	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD TWO (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0013AP	Disposal of Utility Poles (Non-Regulated)	20	EA	\$ _____	\$ _____
0013AQ	Sampling and Analysis of Pole-Mounted Transformers	10	EA	\$ _____	\$ _____
0013AR	Sampling and Analysis of Pad-Mounted Transformers	10	EA	\$ _____	\$ _____
0014	ASBESTOS CONTAINING MATERIAL (ACM) ABATEMENT				
0014AA	ACM Abatement: Notification Fee per Louisiana DEQ	101	EA	\$ _____	\$ _____
0014AB	PCM Analysis	1,000	EA	\$ _____	\$ _____
0014AC	Bulk Sampling (Field Sampling Analysis)	50	EA	\$ _____	\$ _____
0014AD	PLM Analysis	20	EA	\$ _____	\$ _____
0014AE	TEM Analysis	500	EA	\$ _____	\$ _____
0014AF	Full Containment	50,000	SF	\$ _____	\$ _____
0014AG	Limited Containment	50,000	SF	\$ _____	\$ _____
0014AH	Remove Exterior Wall Vapor Barrier: Black Building Paper Behind Shingles	3,000	SF	\$ _____	\$ _____
0014AJ	Remove ACM Brick Lining for Boiler under Metal Jacket Material	150	SF	\$ _____	\$ _____
0014AK	Remove Transite Piping (Thru 12" dia.)	1,500	LF	\$ _____	\$ _____
0014AL	Remove Transite Piping (Greater than 12" dia.)	1,500	LF	\$ _____	\$ _____
0014AM	Remove Transite Water Line (8" dia. or less) Includes handling, transportation and disposal of water line, all excavation, backfilling and grading.	500	LF	\$ _____	\$ _____
0014AN	Remove Transite Water Line (Greater than 8" dia.) Includes handling, transportation and disposal of water line, all excavation, backfilling and grading.	500	LF	\$ _____	\$ _____
0014AP	Remove Abandoned Piping	25	LF	\$ _____	\$ _____
0014AQ	Remove Piping and Insulation (Thru 4" Pipe Diameter)	2,500	LF	\$ _____	\$ _____
0014AR	Remove Piping and Insulation (Greater than 4" Thru 8" Pipe Dia.)	2,500	LF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD TWO (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0014AS	Remove Piping and Insulation (Greater than 8" Thru 12" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0014AT	Remove Piping and Insulation (Greater than 12" Thru 16" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0014AU	Remove Pipe Insulation (Thru 4" Pipe Diameter)	2,500	LF	\$ _____	\$ _____
0014AV	Remove Pipe Insulation (Greater than 4" Thru 8" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0014AW	Remove Pipe Insulation (Greater than 8" Thru 12" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0014AX	Remove Pipe Insulation (Greater than 12" Thru 16" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0014AY	Remove Pipe Fitting Insulation (Thru 4" Pipe Diameter)	200	EA	\$ _____	\$ _____
0014AZ	Remove Pipe Fitting Insulation (Greater than 4" Thru 8" Pipe Dia.)	200	EA	\$ _____	\$ _____
0014BA	Remove Pipe Fitting Insulation (Greater than 8" Thru 12" Pipe Dia.)	200	EA	\$ _____	\$ _____
0014BB	Remove Pipe Fitting Insulation (Greater than 12" Thru 18" Pipe Dia.)	200	EA	\$ _____	\$ _____
0014BC	Remove Pipe or Fitting Insulation by Glove Bag Method	300	EA	\$ _____	\$ _____
0014BD	Remove Boiler Insulation (SF of Surface Area)	450	SF	\$ _____	\$ _____
0014BE	Remove Tank Insulation (SF of Surface Area)	250	SF	\$ _____	\$ _____
0014BF	Remove Transite Flue (SF of Surface Area)	1,200	SF	\$ _____	\$ _____
0014BG	Remove Electrical Wire - Black Wrap and Canvas Material	50	LF	\$ _____	\$ _____
0014BH	Remove Electrical System Component	5	SF	\$ _____	\$ _____
0014BJ	Remove Reflective Hardboard on Light Fixtures	5	SF	\$ _____	\$ _____
0014BK	Remove Duct Insulation Including Flex Duct and Flex Joint	2,000	SF	\$ _____	\$ _____
0014BL	Remove Exterior Wall Insulated Batts	75	SF	\$ _____	\$ _____
0014BM	Remove Wall Mastic	400	SF	\$ _____	\$ _____
0014BN	Remove Ceiling Mastic	1,000	SF	\$ _____	\$ _____
0014BP	Remove Acoustical Ceiling Tile and Grid	700	SF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD TWO (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0014BQ	Remove Glued-on Wall/Ceiling Tile	800	SF	\$ _____	\$ _____
0014BR	Remove 1/4" Paperboard Panels Attached to Wall	150	SF	\$ _____	\$ _____
0014BS	Remove 1/4" Paperboard Panels Attached to Ceiling	100	SF	\$ _____	\$ _____
0014BT	Remove Wall Transite (Interior/Exterior)	1,500	SF	\$ _____	\$ _____
0014BU	Remove Ceiling Transite	1,300	SF	\$ _____	\$ _____
0014BV	Remove Non-Specific Coating on Plywood Walls	500	SF	\$ _____	\$ _____
0014BW	Remove Vinyl Composition Tile Flooring including Adhesive Mastic	50,000	SF	\$ _____	\$ _____
0014BX	Remove Vinyl Composition Sheet Flooring including Adhesive Mastic	5,000	SF	\$ _____	\$ _____
0014BY	Remove ACM Sheetrock - Walls (Unpaneled or Without Wainscot)	5,000	SF	\$ _____	\$ _____
0014BZ	Remove ACM Sheetrock - Walls (Paneled or With Wainscot)	5,000	SF	\$ _____	\$ _____
0014CA	Remove ACM Sheetrock - Ceilings	5,000	SF	\$ _____	\$ _____
0014CB	Remove ACM Wall Plaster (Under Ceramic Tile)	1,000	SF	\$ _____	\$ _____
0014CC	Remove ACM Ceiling Plaster (Under Ceramic Tile)	1,500	SF	\$ _____	\$ _____
0014CD	Remove Friable ACM Ceiling Tile	1,500	SF	\$ _____	\$ _____
0014CE	Remove Sprayed-On Friable ACM (Thru 2" Thick)	1,000	SF	\$ _____	\$ _____
0014CF	Remove Non-Friable ACM Concrete (Thru 10' High)	1,000	SF	\$ _____	\$ _____
0014CG	Remove Friable ACM Shingled Roof (Thru 15' High Eave)	1,500	SF	\$ _____	\$ _____
0014CH	Remove Friable ACM Shingled Roof (Thru 30' Eave Height)	1,000	SF	\$ _____	\$ _____
0014CJ	Remove Non-Friable ACM Shingled Roof (Thru 15' High Eave)	1,500	SF	\$ _____	\$ _____
0014CK	Remove Non-Friable ACM Shingled Roof (Thru 30' Eave Height)	1,000	SF	\$ _____	\$ _____
0014CL	Remove ACM Built-Up Roof (Thru 15' High Eave)	10,000	SF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD TWO (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0014CM	Remove ACM Built-Up Roof (Thru 30' Eave Height)	5,000	SF	\$ _____	\$ _____
0014CN	Remove Friable ACM Roll Roofing (Thru 15' High Eave)	100	SF	\$ _____	\$ _____
0014CP	Remove Friable ACM Roll Roofing (Thru 30' Eave Height)	100	SF	\$ _____	\$ _____
0014CQ	Remove Non-Friable ACM Roll Roofing (Thru 20' High Eave)	100	SF	\$ _____	\$ _____
0014CR	Remove ACM Debris Not Associated with Other Abatement	100	SF	\$ _____	\$ _____
0014CS	Removal of Asbestos Contaminated Soil	1,000	CY	\$ _____	\$ _____
0014CT	Transportation, Handling, & Disposal of ACM (One way. No additional payment for return trip or for delivery of containers to the job site).	10,000	CY	\$ _____	\$ _____
0014CU	Encapsulation (Lockdown)	50,000	SF	\$ _____	\$ _____
0014CV	Removal of Oxychloride Flooring	10,000	SF	\$ _____	\$ _____
0014CW	Industrial Hygienist Services	300	DY	\$ _____	\$ _____
0014CX	Personnel Decon	70	EA.	\$ _____	\$ _____
0014CY	Equipment Decon	70	EA.	\$ _____	\$ _____
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0015	Bond Cost (per \$1,000)	1,000	K	\$ _____	\$ _____
	TOTAL OPTION PERIOD TWO (ITEMS 0011 THRU 0015)			\$ _____	

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD THREE (Date of award through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0016	GENERAL DEMOLITION				
0016AA	Demo. Wood Building (Up to and including 5,000 Square Feet (SF) of Floor Space)	120,000	SF	\$ _____	\$ _____
0016AB	Demo. Wood Building (Between 5,001 and 10,000 SF of Floor Space)	120,000	SF	\$ _____	\$ _____
0016AC	Demo. Wood Building (Greater than 10,000 SF of Floor Space)	40,000	SF	\$ _____	\$ _____
0016AD	Demo. Steel Building (Up to and Including 5,000 Square Feet (SF) of Floor Space)	10,000	SF	\$ _____	\$ _____
0016AE	Demo. Steel Building (Between 5,001 and 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0016AF	Demo. Steel Building (Greater than 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0016AG	Demo. Masonry Building (Up to and Including 5,000 Square Feet (SF) of Floor Space)	10,000	SF	\$ _____	\$ _____
0016AH	Demo. Masonry Building (Between 5,001 and 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0016AJ	Demo. Masonry Building (Greater than 10,000 SF of Floor Space)	20,000	SF	\$ _____	\$ _____
0016AK	Demo. Concrete Sidewalks, Slabs and Walls Beyond the Building Footprint (Thru 6" Thick)	5,000	SF	\$ _____	\$ _____
0016AL	Demo. Concrete Sidewalks, Slabs and Walls Beyond the Building Footprint (Greater than 6" Thick)	5,000	SF	\$ _____	\$ _____
0016AM	Demo. Concrete Curbs & Gutters (Up to and Including 18" Thick)	5,000	LF	\$ _____	\$ _____
0016AN	Construct 4-Inch Sidewalk	500	SF	\$ _____	\$ _____
0016AP	Capping Water Lines	50	EA.	\$ _____	\$ _____
0016AQ	Capping Gas Lines	50	EA.	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD THREE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0016AR	Remove Asphalt Material thru 6" Thick	5,000	SF	\$ _____	\$ _____
0016AS	Demo. Chain-link Fence (Thru 6' Height)	100	LF	\$ _____	\$ _____
0016AT	Demo. Chain-link Fence (Greater than 6' Height)	300	LF	\$ _____	\$ _____
0016AU	Remove Concrete Wheel Stops	70	EA	\$ _____	\$ _____
0016AV	Demo. Chain-Link Gate (Thru 4' W X 6' H)	10	EA	\$ _____	\$ _____
0016AW	Demo. Chain-Link Gate (Greater than 4' W X 6' H Thru 4' W X 8' H)	10	EA	\$ _____	\$ _____
0016AX	Demo. Chain-Link Gate(Greater than 4' W X 8' H Thru 32' W X 8' H)	10	EA	\$ _____	\$ _____
0016AY	Remove Metal Culverts (Less Than 24" dia.) Includes handling, and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0016AZ	Remove Metal Culverts (24" thru 30" diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0016BA	Remove Metal Culverts (Greater than 30" thru 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0016BB	Remove Metal Culverts (Greater than 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0016BC	Remove RCP Culverts (Less than 24" dia.) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0016BD	Remove RCP Culverts (24" thru 30" diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD THREE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0016BE	Remove RCP Culverts (Greater than 30" diameter thru 42" Diameter) includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0016BF	Remove RCP Culverts (Greater than 42" Diameter) Includes handling and disposal of culvert, all excavation, backfilling, rough & finish grading.	200	LF	\$ _____	\$ _____
0016BG	Remove Water Line (6" dia. or less) Includes handling, transportation, & disposal of water line, all excavation, backfilling, rough & finish grading.	1,250	LF	\$ _____	\$ _____
0016BH	Remove Water Line (Greater than 6" dia.) Includes handling, transportation, and disposal of water line, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0016BJ	Remove Gas Line (2" dia. or less) Includes handling, transportation, & disposal of gas line, all excavation, backfilling, rough & finish grading.	1,250	LF	\$ _____	\$ _____
0016BK	Remove Gas Line (Greater than 2" dia.) Includes handling, transportation, & disposal of gas line, all excavation, backfilling, rough & finish grading.	500	LF	\$ _____	\$ _____
0016BL	Grout Sewer Line	450	CF	\$ _____	\$ _____
0016BM	Remove and Dispose of Wiring in Concrete Encased Duct Bank	1,000	LF	\$ _____	\$ _____
0016BN	Remove and Dispose of Wiring in Non-Concrete Encased Duct Bank	1,000	LF	\$ _____	\$ _____
0016BP	Remove and Dispose of Wiring Associated with Electrical Transformers Designated for Removal.	1,000	LF	\$ _____	\$ _____
0016BQ	Backfill, Satisfactory Material, for Building Areas (Includes Compaction)	10,000	CY	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD THREE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0016BR	Backfill, Satisfactory Material, for All Areas of Demolished Pavement (Includes Compaction)	5,000	CY	\$ _____	\$ _____
0016BS	Topsoil: Includes Purchasing, Hauling and Placing Material	5,000	CY	\$ _____	\$ _____
0016BT	Seeding: Includes Fertilizer (Refer to Specs for add'l information)	50,000	SF	\$ _____	\$ _____
0016BU	Sodding: Includes Fertilizer (Refer to Specs for add'l information)	10,000	SF	\$ _____	\$ _____
0016BV	State of Louisiana Notification Fee for Building Demolition	100	EA	\$ _____	\$ _____
0016BW	3 RD Party Inspection	500	HR	\$ _____	\$ _____
0016BX	Demo. 3 Strand Barb Wire Fence	100	LF	\$ _____	\$ _____
0016BY	Construct Chain-link Fence (6' - 7' Height)	100	LF	\$ _____	\$ _____
0016BZ	Remove Aggregate Base Course thru 6" Thick	100	SF	\$ _____	\$ _____
0016CA	Remove Aggregate Base Course greater than 6" Thick	100	SF	\$ _____	\$ _____
0016CB	Remove Bollards	10	EA	\$ _____	\$ _____
0016CC	Remove Trees and Shrubs	100	EA	\$ _____	\$ _____
0016CD	Construct Scaffolding (Up to 8' height)	20	LF	\$ _____	\$ _____
0016CE	Construct Scaffolding (8' - 16' height)	20	LF	\$ _____	\$ _____
0016CF	Construct Scaffolding (Greater than 16' height)	20	LF	\$ _____	\$ _____
0016CG	Emergency Response	1	EA	\$ _____	\$ _____
0017	LEAD-BASED PAINT (LBP) ABATEMENT				
0017AA	Total Lead (Lab Analysis (ICP-AES))	50	EA	\$ _____	\$ _____
0017AB	TCLP (Toxicity Leaching Procedure)(Lead) (EPA Method 1311/6010A) and (Chlordane)(EPA Method 1311/8080)	50	EA	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD THREE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0017AC	Composite Soil Sampling for Lead (Sample Collection Only)	50	EA	\$ _____	\$ _____
0017AD	Removal of Lead-Contaminated Soil	1,000	CY	\$ _____	\$ _____
0017AE	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Thru 3" W)(Does not incl. Disposal Costs)	6,000	LF	\$ _____	\$ _____
0017AF	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Greater than 3" W Thru 6"W)	3,500	LF	\$ _____	\$ _____
0017AG	Remove Exterior Wood Trim Painted with LBP to Remove Asbestos Siding (Greater than 6" W thru 12"W)	3,500	LF	\$ _____	\$ _____
0017AH	Remove Window Frame Trim Painted with LBP to Remove Asbestos Siding (Thru 3" W)(Does not incl. Disposal Costs)	1,000	LF	\$ _____	\$ _____
0017AJ	Remove Window Frame Trim Painted with LBP to Remove Asbestos Siding (Greater than 3" W thru 6"W)	3,500	LF	\$ _____	\$ _____
0017AK	Remove Interior Doors and Trim Painted with LBP(Does not incl. Disposal)	500	EA	\$ _____	\$ _____
0017AL	Remove Exterior Doors and Trim Painted with LBP (Does not incl. Disposal)	200	EA	\$ _____	\$ _____
0017AM	Remove Exterior Masonry Painted with LBP (Does not include Disposal Costs)	5,000	CF	\$ _____	\$ _____
0017AN	Removal of Metal Surface Painted with LBP	5,000	SF	\$ _____	\$ _____
0017AP	Remove Plaster Wall Painted with LBP	5,000	SF	\$ _____	\$ _____
0017AQ	Remove Plaster Ceiling Painted with LBP	5,000	SF	\$ _____	\$ _____
0017AR	Remove Ceiling Tile Painted with LBP	5,000	SF	\$ _____	\$ _____
0017AS	Transportation, Handling, and Disposal of Hazardous Waste	1,000	CY	\$ _____	\$ _____
0017AT	Transportation, Handling, and Disposal of Non-Hazardous Waste	5,000	CY	\$ _____	\$ _____
0017AU	Louisiana Department of Health Notification Fee for Lead-Based Paint Abatement	100	EA	\$ _____	\$ _____
0017AV	Industrial Hygienist Services	300	DY	\$ _____	\$ _____
0017AW	Personnel Decon	70	EA.	\$ _____	\$ _____
0017AX	Equipment Decon	70	EA.	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD THREE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0017AY	Air Monitoring (Personal and Area)	100	EA	\$ _____	\$ _____
0017AZ	Full Containment Barriers (Poly-Enclosures)	20,000	SF	\$ _____	\$ _____
0017BA	Limited Containment Barriers (Poly-Enclosures)	20,000	SF	\$ _____	\$ _____
0017BB	Wipe Samples	50	EA	\$ _____	\$ _____
0018	REGULATED MATERIALS ABATEMENT				
0018AA	Removal and Handling of Fluorescent Light Ballasts (Regulated 4' Light Fixtures)	4,000	EA	\$ _____	\$ _____
0018AB	Removal and Handling of Fluorescent Light Ballasts (non-regulated)	4,000	EA	\$ _____	\$ _____
0018AC	Removal and Handling of Fluorescent Lt. Bulbs/Tubes(Regulated, 4' Light Fixtures)	5,000	EA	\$ _____	\$ _____
0018AD	Removal and Handling of Fluorescent Lt. Bulbs/Tubes(Regulated, 8' Light Fixtures)	5,000	EA	\$ _____	\$ _____
0018AE	Removal and Handling of HVAC Thermostats (Refer to Spec. 02051)	100	EA	\$ _____	\$ _____
0018AF	Removal and Handling of Lighted Exit Signs, Smoke Detectors, Emergency Lights and Rechargeable Batteries (Refer to Spec. 02051)	500	EA	\$ _____	\$ _____
0018AG	Remove and Dispose of Refrigeration Equipment Containing Ozone-Depleting Chemicals (ODCs) (Refer to Spec. 02051)	100	EA	\$ _____	\$ _____
0018AH	Remove and Dispose of Drinking Fountains (Includes Wall/Floor Mounted Units) Containing ODCs (See Spec. 02051)	200	EA	\$ _____	\$ _____
0018AJ	Remove and Dispose of Halon Fire Extinguishers (See Spec. 02051)	300	EA	\$ _____	\$ _____
0018AK	Removal and Handling of Pad Mounted PCB Transformers.	10	EA	\$ _____	\$ _____
0018AL	Removal and Handling of Pole Mounted PCB Transformers.	10	EA	\$ _____	\$ _____
0018AM	Disposal of Transformers (Non-PCB)	10	EA	\$ _____	\$ _____
0018AN	Removal, Transportation, and Disposal of Utility Poles (Creosote Treated) (Refer to Spec. 02051)	300	EA	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD THREE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0018AP	Disposal of Utility Poles (Non-Regulated)	20	EA	\$ _____	\$ _____
0018AQ	Sampling and Analysis of Pole-Mounted Transformers	10	EA	\$ _____	\$ _____
0018AR	Sampling and Analysis of Pad-Mounted Transformers	10	EA	\$ _____	\$ _____
0019	ASBESTOS CONTAINING MATERIAL (ACM) ABATEMENT				
0019AA	ACM Abatement: Notification Fee per Louisiana DEQ	101	EA	\$ _____	\$ _____
0019AB	PCM Analysis	1,000	EA	\$ _____	\$ _____
0019AC	Bulk Sampling (Field Sampling Analysis)	50	EA	\$ _____	\$ _____
0019AD	PLM Analysis	20	EA	\$ _____	\$ _____
0019AE	TEM Analysis	500	EA	\$ _____	\$ _____
0019AF	Full Containment	50,000	SF	\$ _____	\$ _____
0019AG	Limited Containment	50,000	SF	\$ _____	\$ _____
0019AH	Remove Exterior Wall Vapor Barrier: Black Building Paper Behind Shingles	3,000	SF	\$ _____	\$ _____
0019AJ	Remove ACM Brick Lining for Boiler under Metal Jacket Material	150	SF	\$ _____	\$ _____
0019AK	Remove Transite Piping (Thru 12" dia.)	1,500	LF	\$ _____	\$ _____
0019AL	Remove Transite Piping (Greater than 12" dia.)	1,500	LF	\$ _____	\$ _____
0019AM	Remove Transite Water Line (8" dia. or less) Includes handling, transportation and disposal of water line, all excavation, backfilling and grading.	500	LF	\$ _____	\$ _____
0019AN	Remove Transite Water Line (Greater than 8" dia.) Includes handling, transportation and disposal of water line, all excavation, backfilling and grading.	500	LF	\$ _____	\$ _____
0019AP	Remove Abandoned Piping	25	LF	\$ _____	\$ _____
0019AQ	Remove Piping and Insulation (Thru 4" Pipe Diameter)	2,500	LF	\$ _____	\$ _____
0019AR	Remove Piping and Insulation (Greater than 4" Thru 8" Pipe Dia.)	2,500	LF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD THREE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0019AS	Remove Piping and Insulation (Greater than 8" Thru 12" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0019AT	Remove Piping and Insulation (Greater than 12" Thru 16" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0019AU	Remove Pipe Insulation (Thru 4" Pipe Diameter)	2,500	LF	\$ _____	\$ _____
0019AV	Remove Pipe Insulation (Greater than 4" Thru 8" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0019AW	Remove Pipe Insulation (Greater than 8" Thru 12" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0019AX	Remove Pipe Insulation (Greater than 12" Thru 16" Pipe Dia.)	2,500	LF	\$ _____	\$ _____
0019AY	Remove Pipe Fitting Insulation (Thru 4" Pipe Diameter)	200	EA	\$ _____	\$ _____
0019AZ	Remove Pipe Fitting Insulation (Greater than 4" Thru 8" Pipe Dia.)	200	EA	\$ _____	\$ _____
0019BA	Remove Pipe Fitting Insulation (Greater than 8" Thru 12" Pipe Dia.)	200	EA	\$ _____	\$ _____
0019BB	Remove Pipe Fitting Insulation (Greater than 12" Thru 18" Pipe Dia.)	200	EA	\$ _____	\$ _____
0019BC	Remove Pipe or Fitting Insulation by Glove Bag Method	300	EA	\$ _____	\$ _____
0019BD	Remove Boiler Insulation (SF of Surface Area)	450	SF	\$ _____	\$ _____
0019BE	Remove Tank Insulation (SF of Surface Area)	250	SF	\$ _____	\$ _____
0019BF	Remove Transite Flue (SF of Surface Area)	1,200	SF	\$ _____	\$ _____
0019BG	Remove Electrical Wire - Black Wrap and Canvas Material	50	LF	\$ _____	\$ _____
0019BH	Remove Electrical System Component	5	SF	\$ _____	\$ _____
0019BJ	Remove Reflective Hardboard on Light Fixtures	5	SF	\$ _____	\$ _____
0019BK	Remove Duct Insulation Including Flex Duct and Flex Joint	2,000	SF	\$ _____	\$ _____
0019BL	Remove Exterior Wall Insulated Batts	75	SF	\$ _____	\$ _____
0019BM	Remove Wall Mastic	400	SF	\$ _____	\$ _____
0019BN	Remove Ceiling Mastic	1,000	SF	\$ _____	\$ _____
0019BP	Remove Acoustical Ceiling Tile and Grid	700	SF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD THREE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0019BQ	Remove Glued-on Wall/Ceiling Tile	800	SF	\$ _____	\$ _____
0019BR	Remove 1/4" Paperboard Panels Attached to Wall	150	SF	\$ _____	\$ _____
0019BS	Remove 1/4" Paperboard Panels Attached to Ceiling	100	SF	\$ _____	\$ _____
0019BT	Remove Wall Transite (Interior/Exterior)	1,500	SF	\$ _____	\$ _____
0019BU	Remove Ceiling Transite	1,300	SF	\$ _____	\$ _____
0019BV	Remove Non-Specific Coating on Plywood Walls	500	SF	\$ _____	\$ _____
0019BW	Remove Vinyl Composition Tile Flooring including Adhesive Mastic	50,000	SF	\$ _____	\$ _____
0019BX	Remove Vinyl Composition Sheet Flooring including Adhesive Mastic	5,000	SF	\$ _____	\$ _____
0019BY	Remove ACM Sheetrock - Walls (Unpaneled or Without Wainscot)	5,000	SF	\$ _____	\$ _____
0019BZ	Remove ACM Sheetrock - Walls (Paneled or With Wainscot)	5,000	SF	\$ _____	\$ _____
0019CA	Remove ACM Sheetrock - Ceilings	5,000	SF	\$ _____	\$ _____
0019CB	Remove ACM Wall Plaster (Under Ceramic Tile)	1,000	SF	\$ _____	\$ _____
0019CC	Remove ACM Ceiling Plaster (Under Ceramic Tile)	1,500	SF	\$ _____	\$ _____
0019CD	Remove Friable ACM Ceiling Tile	1,500	SF	\$ _____	\$ _____
0019CE	Remove Sprayed-On Friable ACM (Thru 2" Thick)	1,000	SF	\$ _____	\$ _____
0019CF	Remove Non-Friable ACM Concrete (Thru 10' High)	1,000	SF	\$ _____	\$ _____
0019CG	Remove Friable ACM Shingled Roof (Thru 15' High Eave)	1,500	SF	\$ _____	\$ _____
0019CH	Remove Friable ACM Shingled Roof (Thru 30' Eave Height)	1,000	SF	\$ _____	\$ _____
0019CJ	Remove Non-Friable ACM Shingled Roof (Thru 15' High Eave)	1,500	SF	\$ _____	\$ _____
0019CK	Remove Non-Friable ACM Shingled Roof (Thru 30' Eave Height)	1,000	SF	\$ _____	\$ _____
0019CL	Remove ACM Built-Up Roof (Thru 15' High Eave)	10,000	SF	\$ _____	\$ _____

BIDDING SCHEDULE

(To be attached to **SF 33 (Am#1)**)

OPTION PERIOD THREE (Date of exercising option through a 12-month period)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0019CM	Remove ACM Built-Up Roof (Thru 30' Eave Height)	5,000	SF	\$ _____	\$ _____
0019CN	Remove Friable ACM Roll Roofing (Thru 15' High Eave)	100	SF	\$ _____	\$ _____
0019CP	Remove Friable ACM Roll Roofing (Thru 30' Eave Height)	100	SF	\$ _____	\$ _____
0019CQ	Remove Non-Friable ACM Roll Roofing (Thru 20' High Eave)	100	SF	\$ _____	\$ _____
0019CR	Remove ACM Debris Not Associated with Other Abatement	100	SF	\$ _____	\$ _____
0019CS	Removal of Asbestos Contaminated Soil	1,000	CY	\$ _____	\$ _____
0019CT	Transportation, Handling, & Disposal of ACM (One way. No additional payment for return trip or for delivery of containers to the job site).	10,000	CY	\$ _____	\$ _____
0019CU	Encapsulation (Lockdown)	50,000	SF	\$ _____	\$ _____
0019CV	Removal of Oxychloride Flooring	10,000	SF	\$ _____	\$ _____
0019CW	Industrial Hygienist Services	300	DY	\$ _____	\$ _____
0019CX	Personnel Decon	70	EA.	\$ _____	\$ _____
0019CY	Equipment Decon	70	EA.	\$ _____	\$ _____
0020	Bond Cost (per \$1,000)	1,000	K	\$ _____	\$ _____
TOTAL OPTION PERIOD THREE (ITEMS 0016 THRU 0020)				\$ _____	
TOTAL BASE PLUS OPTIONS 1, 2, AND 3 (ITEMS 0001 THRU 0020)				\$ _____	

NOTES TO BID SCHEDULE:

1. BID ITEM DEFINITIONS

Support framing shall be considered incidental to the construction of containment barriers and no separate payment will be made.

Pre-cleaning of areas from which ACM is to be removed will be considered incidental to the abatement process and no separate payment will be made. Refer to specifications SECTION: 13280 - ASBESTOS ABATEMENT, for pre-cleaning method.

See SECTION: 02051 for handling of PCBs, fluorescent light bulbs, ballasts, thermostats, OCDs, transformers, utility poles, chlordane, batteries, smoke detectors, emergency lights, lighted exit signs, etc.

Mobilization and Demobilization costs shall be included in the applicable line item unit prices on a pro-rata basis. Bond cost shall only reflect the actual cost projected for bonding.

All required personnel, equipment and laboratory costs that are necessary to perform specified sampling, analysis and preparation of all plans and reports shall be included in the applicable line item unit prices on a pro-rata basis.

2. If a modification to a bid based on unit prices is submitted, which provides for a lump sum adjustment to the total estimated cost, the application of the lump sum adjustment to each unit price in the bid schedule must be stated. If it is not stated, the bidder agrees that the lump sum adjustment shall be applied on a pro rata basis to every unit price in the bid schedule.

3. Costs attributable to Division 01 - General Requirements are assumed to be prorated among bid items listed.

4. TASK ORDER: Line items applicable to each individual Task Order, quantities for each line item, performance period for completion of work under the Task Order will be agreed upon in writing by the contractor and the government prior to the issuance of any Task Order. The haul route will be determined for each Task Order. The unit price for each line item in this bidding schedule shall apply to any quantity applicable for any single bid item.

5. Bidder must bid on all line items in the bidding schedule. Omission of any item may result in rejection of the bid.

6. Quantities in the Bidding Schedule represent estimated quantities for bid evaluation purposes only.

7. CLARIFICATION AND COMMENTS PERTAINING TO THE SCHEDULE: Items listed in the bid schedule are subject to the following clarifications:

DEMOLISH or **REMOVE** (GENERAL DEMOLITION ONLY) includes all work required to completely remove and dispose of the item or entire building as stated. Building demolition will include the floors, foundations, interior/exterior equipment, attachments, utilities and fixtures within the building 5' line. Concrete porch slabs, steps, landings, ramps, docks, sidewalks and other

miscellaneous concrete items will be measured from the building footprint.

DISPOSAL includes all costs, procedures, and equipment required for the complete disposal of demolition debris, discarded construction debris, or hazardous material. When disposal is indicated as part of a specific line item, the intent is to include disposal costs for that specific item. When disposal is given as a separate line item the intent is for that line item to include costs for accumulated amounts of demolition or hazardous material debris.

FULL CONTAINMENT or Full-Scale Containment is used for projects involving significant fiber release caused by the quantity and/or friability of the ACM and if the environmental hazard and personal risk is high. For a comprehensive description of Negative pressure Enclosure, refer to EP 1110-1-11 dated 15 JUL 92.

LIMITED CONTAINMENT includes Small-Scale Containment or Mini-Enclosures.

Small-Scale Containment is used for short duration abatement activities where removal of ACM is not the primary goal of the job, or where exposure to ACM can be kept below the action level via worker isolation techniques, such as a glove bag.

Mini-Enclosures provides an air-tight enclosure around either a low or high hazard work area that is of limited size. Mini-Enclosures limits the spread of ACM fibers to a small area rather than an entire room, and offers a quick and relatively inexpensive enclosure.

For a comprehensive description of limited containment, refer to SECTION 13280 of these specifications and EP 1110-1-11 dated 15 JUL 92.

The following bid item numbers refer to the base bid items only. The notes apply to all the items with similar descriptions in the option years.

0001BQ Refer to specifications SECTIONS: 02920 & 02300 for
&0001BR satisfactory fill material description.

0002AS **HAZARDOUS WASTE** - Refers to any lead contaminated material with a TCLP analysis result of 5.0 mg/l or greater. These wastes must be disposed of at an approved hazardous waste site.

0002AT **NON HAZARDOUS WASTE** - Refers to any lead contaminated material with a TCLP analysis result of less than 5.0 mg/l.

0003AG REFRIGERATION EQUIPMENT CONTAINING ODCs - Refrigeration equipment refers to the following types of equipment: refrigeration equipment for HVAC Systems, freezers, refrigerators, ice machines, beverage and refrigerated food dispensers, biomedical equipment, and other ODC-

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-03-B-0013
BIDDING SCHEDULE (continued)

containing equipment encountered for which a separate bid item is not listed on the bidding schedule.
type.

0004AA The Unit of Measure "EA" will cover costs associated with the contractor's time in preparing paperwork for asbestos abatement notification to the Louisiana DEQ.

0004AF The unit cost for containment barriers shall reflect the use of 6-mil minimum polyethylene sheeting.
&0004AG

0004CU Unit price for lockdown as listed on the bidding schedule is only for lockdown of surfaces from which asbestos containing material has been removed. All other uses of lockdown will be considered incidental to the abatement process and no separate payment will be made (for example, lockdown on poly used for containment barriers, protective barriers, drop cloth, etc.).

8. For the purpose of this Solicitation, the unit of measure SF represents Square Foot, EA represents Each, CY represents Cubic Yard, LF represents Linear Foot, SY represents Square Yard, K represents Thousands, HR represents Hours, and DY represents Days.

9. Limit the unit price to two decimal places. When multiplying the estimated quantity by the unit price do not round the extended amount up or down.

10. Furnish the DUNS number applicable to that name and address, if known, of the bidder.

DUNS: _____

11. All prospective awardees must be registered in the Central Contractor Registration database prior to award during performance, and through final payment of any contract resulting from this solicitation. See Section L, entitled Required Central Contractors Registration.

12. THIS SOLICITATION IS A COMPETITIVE 8(A) PROCUREMENT RESTRICTED TO LOUISIANA AND TEXAS 8(A) PROGRAM PARTICIPANTS.

13. Mr. Claude B. Graves is the approved Ordering Officer with authority to issue Task Orders under this contract.

SECTION 01421

BASIC STORM WATER POLLUTION PREVENTION PLAN
05/2003
AMENDMENT NO. 0001

PART 1 GENERAL

NOTE: The Contractor shall review all notes in this section and determine if the project requires a SWPPP and determine a SWPPP for a small or large construction site. Submittals for small and large site construction are different. The Contractor shall review the attached LPDES General Permits. The Contractor shall edit this section (including deletion of non applicable notes for the site) by reviewing storm water general permit and submit all required documents herein (including SECTION(s) 01356, 02919, 02921) for government review and approval, prior to Notice of Intent (if required) and subsequent site disturbing activities.

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

- | | |
|------------|---|
| 40 CFR 110 | Protection of Environment: Subchapter D--WATER PROGRAMS, Discharge of Oil |
| 40 CFR 122 | EPA Administered Permit Programs: The National Pollutant Discharge Elimination System |
| 40 CFR 123 | State Program Requirements: The National Pollutant Discharge Elimination System |

FEDERAL REGISTER (FR)

- | | |
|-----------|--|
| 63 FR 128 | (6 July 1998) Water Pollution; Discharge of Pollutants (NPDES): Storm Water Discharges - Construction Activity; General Permits, 36490-36519 |
|-----------|--|

1.2 SUMMARY

NOTE 1 : Construction projects shall obtain permit coverage for storm water discharge during construction for large and small construction activities (reference web site below for applicable regulation and definitions.) The Storm Water Pollution Prevention Plan (SWPPP) shall be prepared in accordance with the applicable Federal, state, and local requirements for the permit coverage. The Government and the Contractor shall file a separate Notice of Intent (NOI). The construction Contractor shall file the Notice of Termination (NOT) after final site stabilization. The Contractor shall prepare the NOT for the Government and file NOT on behalf of the Government with the signature of an authorized person. This outline shall be used to prepare a basic SWPPP by the project designer. The Contractor shall use the basic SWPPP to prepare the Contractor operation and field activity specific SWPPP. The Contractor shall to edit this section for each delivery order that requires a SWPPP for the construction site.

DISCHARGES TO WATER QUALITY-IMPAIRED RECEIVING WATERS. Storm water from project sites discharging constituents of concern (i.e. lead) to impaired water bodies for which there is a total maximum daily load (TMDL) implementation plan shall obtain the appropriate type of permit and comply with the permit conditions. A storm water sediment, oil, and grease interceptor unit shall be utilized to remove constituents of concern as a permanent storm water treatment device. The interceptor unit shall have a stainless steel expanded mesh screen with a minimum opening of 4700 microns (4.7 mm or 0.185 inches) for removal of fine sediment in storm water that will reduce TMDL of constituents of concern.

NOTE 2: The SWPPP designer shall delete all notes from the paragraphs below, review, and edit this section to prepare the basic SWPPP.

NOTE 3: The correct Notice of Intent (NOI) and Notice of Termination (NOT)

forms shall be used for LPDES general permits.

This Section provides a Basic Storm Water Pollution Prevention Plan (SWPPP) that meets the Louisiana Pollutant Discharge Elimination System (LPDES) General Permit. Both the Government and the Contractor meet the definition of operator for the construction activities. The Government has control over the construction plans and specifications. The Contractor has day-to-day control of field activities to ensure compliance with storm water construction permit. The Government or environmental project designer will prepare a Basic SWPPP. The Contractor shall prepare a field and operation specific SWPPP by meeting requirements in the LPDES General Permit, this section, and the approved Contractor's SWPPP. Permit office, forms, and regulations can be accessed at the following web sites:

<http://www.deq.state.la.us/permits/lpdes/fin0999.pdf> (for large construction site, five acres or more)
http://www.deq.state.la.us/permits/lpdes/FP_Lar20000.pdf (for small construction site, equal to or greater than one acre and less than five acres)

The SWPPP shall include both the narrative and drawings. The SWPPP narrative shall describe at least the following: description of project and construction activities, potential pollutants and sources, pollution control measures (both structural and non-structural), best management practices (BMP), schedule or sequence of major construction activities, temporary and permanent stabilization methods utilized at disturbed areas, requirements for notifications (i.e. NOI, NOT, MS4), and necessary attachments to implement SWPPP at the job site. The SWPPP site plans shall include project location vicinity map, facility layout, site features and grading, surface water flow direction, locations and types of structural storm water control devices, legend and site direction indicating north arrow, and construction detail of each structural control device. The SWPPP prepared by the Contractor shall be submitted to the Government for approval prior to submittal of NOI to the regulatory agency. There is no separate payment for work required in this section.

1.2.1 Editable Copy

An editable version of this Section is located on the Contract award CD-ROM disk. It is in the Corps of Engineers' Specsintact software format.

1.3 PROJECT IDENTIFICATION

PROJECT TITLE: [_____]

LOCATION: LOUISIANA

1.4 PROJECT DESCRIPTION

NOTE: Provide a brief description of the project and the construction activities associated with it (i.e. clearing and grubbing; grading; concrete and asphalt pavement; fencing; landscaping; describe project location (county, LATITUDE & LONGITUDE, surrounding streets), necessary site work and utility service lines; and demolition, recycling and disposal of regulated substances, etc). Identify the total project area (acres) for the proposed construction and the existing demolition sites. Identify the total disturbed area including the construction right-of-way. For example, a barracks rebuild project may have a project area of 3 hectares (7.4 acres), but only 1.98 hectares (4.9 acres) will be disturbed ground surface.

The scope of this project includes construction of new [____], [storm sewer,] [sanitary sewer,] [____,] [parking lots,] [access drives,] [sidewalks,] [lighting,] [security fence,] [communication system,] and [____]. [In addition, this project shall include demolition of [____] at [____].] The total project area of the new construction site includes [off-site material storage,] [overburden and stockpiled material,] [borrow areas,] is roughly [____] acres. [The total project area of the remote demolition site is roughly [____] acres]. The total disturbed area [including the new construction and remote demolition sites] in this contract is roughly [____].

1.5 Bid Options

There are [no] Bid Options for this project.][They are:]

[____]
[_____]]

1.6 STANDARD INDUSTRIAL CLASSIFICATION (SIC)

NOTES: SIC codes are obtained from the Standard Industrial Classification Manual published by Office of Management and Budget (OMB). For construction activity

permit, the primary and sometimes the secondary codes will be for the construction activity. The second through the fourth codes will generally relate to the ultimate use of the project. Use one (1) to maximum of four (4) codes as needed to adequately describe the project.

[1521 General Contractors - Single Family Houses]

[1522 - General Contractors - Residential Buildings, other than Single Family
(i.e. barracks)]

[1541 - General Contractors -Industrial Buildings and Warehouses]

[1542 - General Contractors - Non-Residential Building, other than Industrial
Buildings and Warehouses (i.e. administrative buildings)]

[1611 - Highways and Street Construction, Except Elevated Highways]

[1623 - Water, Sewer, Pipeline, and Communications and Power Line Construction]

[1629 - Heavy Construction, Not Elsewhere Classified (i.e. athletic fields, cofferdams,
dikes, boat docks, railroads, reservoirs, water or sewage treatment plant)]

[1771 - Concrete Work (includes asphalt, i.e. access drives and parking lots, culvert
construction)]

[1794 - Excavation Work (include trenching and earth moving)]

[4581 - Airports, Flying Fields, and Airport Terminal Services]

[7033 - Recreational Vehicle Parks and Campsites]

[7538 - General Automotive Repair Shops]

[7699 - Repair Shops and Related Services, Not Elsewhere Classified (i.e. military
equipment repair, machinery cleaning)]

[7999 - Amusement and Recreation Services, not Elsewhere classified (i.e. beaches,
fishing piers, picnic grounds)]

[8062- General Medical and Surgical Hospitals]

[9711 - National Security (a general category for military facilities)]

1.7 LOCATION

NOTES: Provide a narrative description of the project location, including street names or easily recognized landmarks. As a minimum, include the following: (1) project site street name and boundary streets, (2) latitude and longitude of the project center to the nearest 15 seconds, or (3) quarter, section, township, and range in which the project is located. It is necessary describe all disturbed areas, each detached locations for new construction and remote demolition sites. Provide physical address for the new and the demolition sites. The new facility layout shall be provided to installation project management for the future physical address.

The new facility project site is within the city boundary of [City name] and is in [COUNTY name]. The project site is bounded by [name all adjacent streets]. The new facility project center is located approximately at [__] degrees [__] minutes [__] seconds latitude, [__] degrees [__] minutes [__] seconds longitude]. The physical address for the new facility is [__]. The demolition site is bounded by [__]. [The demolition site project center is approximately at [__] latitude and [__] longitude. The physical address of the demolition site is [____].]

1.8 RECEIVING WATERS

NOTES: Identify the body of water which will receive runoff from the site. If it is a tributary to a major river, identify the tributary and the river into which it flows. If the runoff is collected by a storm drainage system, identify the operator of the system (i.e. the name of the base or municipality) and the creek on site and the ultimate receiving water. An arrow showing direction to the receiving waters should be labeled on the grading and drainage plans.

The storm runoff from the new facility site flows [direction] [into new storm drain] [by

sheet flow], then flows [direction] to [name of Creek] ultimately to [name of River] [name of Basin]. [The storm runoff from the demolition site flows [direction] [to storm drain] [by sheet flow], then flows [direction] to [____.]]

PART 2 SITE DESCRIPTION

2.1 EXISTING CONDITIONS

NOTES: This subsection will be similar to the site description paragraph in the Civil Design Analysis. Describe the current site conditions. Include information on drainage patterns and runoff coefficients. Also discuss the design storm frequencies used for runoff volume calculations. If the site is located adjacent to an existing industrial facility or in a community greater than 100,000 people, records of storm water quality near your site may be available. Contact the appropriate military base or municipality and include any available data in this subsection.

The site generally slopes from [north] [northwest] [northeast] [west] [east][southwest][southeast] [____] to [north] [northwest] [northeast] [west] [east][southwest][southeast] [____] with an average slope of [__] percent. There are currently [no] [an existing] underground storm drainage facilities near the new facility site. Estimated existing runoff coefficients vary from [____] to [____]. Ten-year storm frequency and [__] minutes duration with [____] inches per hour intensity was used for the design of the storm drainage system. [There are currently [no] [an existing] underground storm drainage facilities at the demolition site. The demolition site generally slopes from [east] [south] to [north] [west] with an average slope of [] percent.]

2.2 FUTURE CONDITIONS

NOTES: Describe the site conditions which will exist upon the completion of construction activities. Include estimates of future runoff coefficients. Concentrate on features which affect storm water volume and drainage. Detailed information about pavement sections, handicap access, parking spaces, fence type, etc. is not necessary unless it impacts runoff.

Grades at the new facility site will not change significantly and is roughly about [____] percent from [north] [northwest] [northeast] [____] to [____]. Completed facility site drainage will flow [into a new underground drainage system] [by sheet flow]. The grades surrounding the building is approximately [____] percent grade. The new project site will have a [building,] [access roads,] [service drives,] [____], [landscaping] [and turfing]. Estimated future runoff coefficients vary from [____] to [____].

2.3 CONSTRUCTION PHASING

NOTES: Describe the project start and completion dates. Describe the sequence of MAJOR construction activities associated with the project.

1. Major Construction Activities at New Facility Site

A. Clearing and Grubbing - (NOTE: The SWPPP designer shall discuss limit of clearing and grubbing or indicate that it has been delineated on the SWPPP drawing. If possible, preserve the existing vegetation to minimize soil erosion.)

B. Grading, Construct Site Drainage Features and Utilities - (NOTE: The SWPPP designer shall discuss grading for positive removal of most storm water from site via sheet flow into the new trench drain, sidewalk drains and curb gaps, and eventually empties into the existing storm drainage system.

C. Construction Flatwork & Phasing- (NOTE: The SWPPP designer shall discuss the activities on construction phasing and flatwork.)

D. Site Stabilization - (NOTE: The SWPPP designer shall discuss methods for temporary and permanent stabilization.)

2. Major Construction Activities for Demolition Site

A. Removal, Recycling, or Disposal of regulated materials prior to demolition. (NOTE: The SWPPP shall discuss the regulated materials and their sequence of removal and disposal in this project.)

B. Demolition - (NOTE: The SWPPP designer shall discuss all demolition needed for site, electrical, mechanical, environmental, etc.)

C. Grading and Drainage - (NOTE: The SWPPP designer shall discuss restoration to existing grade and drainage pattern.)

D. Site Stabilization - (NOTE: The SWPPP designer shall discuss method used for permanent stabilization.)

The Contractor shall establish storm water control structures prior to conducting any site disturbing activities. Then subsequent construction activities includes clearing, grubbing, grading, constructing site drainage devices and utilities, foundation, and paving. The Contractor shall maintain temporary and permanent site stabilization at each portion of site in accordance with Section 3.0 EROSION AND SEDIMENT CONTROLS. Storm water control structures shall not be removed after final stabilization and approval of the COR. Final stabilization is established at the disturbed site when a vegetative cover with a density of 70% of the native undisturbed area. It is a Federal and state requirement that the Contractor shall record date of these major construction site activities and dates of stabilization (see paragraph ATTACHMENTS). Construction of this project will start tentatively on [_____] and will be completed on [_____].

2.4 SOILS DATA

NOTES: Provide the following soils information about this site. Possible sources of information are soil borings and USDA soil survey data or other published sources. Also cite the source of quantitative and qualitative data (e.g. Soil Survey of El Paso County, Texas, issued November 1971 by the United States Department of Agriculture, Soil Conservation Service).

[_____]

2.5 DRAWINGS

NOTE: Identify drawing sheet number, and title of sheet. Also attach a copy of each referenced sheet when submitting the SWPPP for Government review.

The site map or maps should be clear enough to interpret the following: Drainage patterns; appropriate slopes after major grading; show limit of soil disturbance area and perimeter control (in most cases, it is the same as grading limits or construction right-of-way); outline of areas not to be disturbed during construction (i.e. vegetative buffer zones, cultural resources, wetlands, and area of environmental concern); locations of both existing and new storm water control devices at inlet protections, and along drainage ways leaving from the site; locations of major structural and non-structural storm water controls (planned or existing); areas where temporary stabilization practices are expected to occur; surface water (including wetlands) locations (NOTE: If the site is not adjacent to surface water, indicate the general direction of flow to the nearest surface water with a "directional arrow" on grading map; identify the name of water way as lake, stream, creek, river, unnamed tributary of named receiving stream, etc.); site storm water discharge locations and outfall protection devices; construction details of storm water structural controls. If permanent stabilization includes establishment of turf, indicate or describe the area to be stabilized by turf (or other method). Show locations for off-site material, clean dirt disposal, borrow, fill areas and the necessary storm water control devices on the PROJECT LOCATION AND VICINITY MAP. Contractor operation and field activity specific SWPPP drawings (i.e. revised SWPPP EROSION AND SEDIMENT CONTROL PLAN) shall indicate equipment, staging, parking, and storage areas and the necessary storm water control devices; location of concrete or asphalt batch plant and storm water control devices. The SWPPP drawings shall, as a minimum, include the following:

Sheet [____] PROJECT LOCATION AND VICINITY PLAN
Sheet [____] [EROSION AND SEDIMENT CONTROL PLAN I]
Sheet [____] [EROSION AND SEDIMENT CONTROL PLAN II]
Sheet [____] [_____]
Sheet [____] [EROSION AND SEDIMENT CONTROL DETAILS]

PART 3 EROSION AND SEDIMENT CONTROLS

3.1 TEMPORARY STABILIZATION

NOTES: This subsection is generally developed by the landscape architect. Stabilization measures may vary with areas precluded by seasonal arid conditions.

Discuss acceptable methods for stabilization of soil which will be exposed for longer than 21 days during construction activities. The landscape architect shall identify a method for temporary stabilization and edit the appropriate specification section. Stabilization practices includes but are not limited to establishment of temporary or permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation, and other similar measures.

When construction activities cease for periods longer than 14 days, when there are contract delays in turfing operation and a quick cover is required to prevent erosion, or when seasonal conditions preclude immediate permanent stabilization measures, the Contractor shall provide temporary soil stabilization. The disturbed areas eligible for temporary stabilization consists of all unpaved, graded, and disturbed portions of the site and no further field work is scheduled beyond 14 days. However, if the earth disturbing activities will be resumed in 21 days, temporary stabilization measures are not required to be initiated. Temporary stabilization is discussed in Section 01356A STORM WATER POLLUTION PREVENTION MEASURES. Temporary stabilization measures when construction activities is temporary ceased shall be [_____]. [Reference paragraph "Anchoring Mulch" of Section 02916 MULCHING FOR EROSION CONTROL.] [Reference specification section [02921 SEEDING] [02922 SODDING] [02923 SPRIGGING] [02919 TOPSOILING] [02924 SEEDING].]

3.2 PERMANENT STABILIZATION

NOTES: This subsection primarily consists of the final landscaping and turfing plan. The landscape architect shall edit appropriate specification sections to determine the permanent stabilization practice for the completed project site.

Permanent stabilization on disturbed, unpaved, and graded areas shall be initiated no more than 14 days after construction activities have ceased permanently. Final or permanent stabilization shall be in accordance with specification sections [02300 EARTHWORK,] [02916 MULCHING FOR EROSION CONTROL,] [02921 SEEDING,] [02922 SODDING,] [02923 SPRIGGING,] [02919 TOPSOILING,] [02924 SEEDING,] [and] [[02925][02926] ESTABLISHMENT OF TURF][_____].

3.3 SEDIMENT BASIN

NOTES: Where attainable, the NPDES, TPDES, LPDES regulation requires a temporary sediment basin for sites where 10 acres or more are disturbed at one time. The Contractor shall time construction activities and control site disturbed areas. A sediment basin may not be attainable if land adjacent to the construction site is not available for use as a basin, if runoff from the site does not drain to a common collection point, or if difficult site conditions result in the cost of the basin being prohibitive. Identify whether or not a temporary (or permanent) basin will be used for the project site. If a basin is not needed or is unattainable, provide justification. If a basin is to be used, include the design (basin layout) on the civil (site) drawings and provide the appropriate specifications. The basin shall provide storage for a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained until final site stabilization. Where rainfall data is not available or a calculation cannot be performed, the basin shall provide storage of 102 cubic meters (3,600 cubic feet) for each hectare (acre) drained until site final stabilization.

The [temporary] [permanent] sediment basin has a total storage capacity of [_____] cubic feet.] [The runoff from the site does not drain to a common collection point; therefore, a temporary sediment basin is not required.] [A temporary sediment basin is not required because construction activities at each portion of the disturbed site is less than 10 acres.]

3.4 STRUCTURAL CONTROLS

NOTES: Use as many subsections as necessary to adequately describe erosion and sediment control structures used during construction. Possible subsections include SILT FENCE, ROCK BERM OR CHECK DAM, STABILIZED CONSTRUCTION INGRESS/EGRESS, DIVERSION or EARTH DIKE, INLET PROTECTION DEVICE, OUTLET PROTECTION DEVICE, SAND BAG BERM, etc. Typical structural control detail drawings for this contract shall be submitted with the SWPPP. See Section

01356A STORM WATER POLLUTION PREVENTION MEASURES.

3.4.1 Silt Fence

Silt Fence is used for construction site perimeter control. Silt Fence shall not be used in stream or swale. Sediment at 1/3 height of the fence shall be removed. The Contractor shall verify field conditions, inspect integrity, remove accumulated silt, and maintain silt fence.

3.4.2 Straw Bale Dike

Straw Bale Dike is used for perimeter control and around unpaved perimeter of curb and surface inlet, new manhole, and trenched material from utility construction. Straw Bale Dike shall not be used in stream or swale. Straw Bale Dike shall only be used where the effectiveness is required for less than 3 months. Sediment at 1/2 height of the bale barrier shall be removed. The Contractor shall inspect Straw Bale Dike locations and ensure the bales are intact and eliminating sediment from storm runoff.

3.4.3 Stabilized Construction Ingress/Egress

The Contractor shall establish, inspect, and maintain the stabilized construction ingress/egress at the juncture between the unpaved new access road and the existing paved roadway. The Contractor shall determine locations for stabilized construction entrance/egress on the Contractor's field and operation specific SWPPP. The stabilized construction entrance/egress shall be away from waterways. The minimum width and depth of entrance is 15 feet and 20 feet, respectively for site 1 acre or larger. For sites over 10 acres, the minimum width and depth of entrance is 25 feet and 50 feet, respectively. If possible, small entrance shall be incorporated into small lot construction.

3.4.4 Contractor Staging, Parking, Material Storage, Borrow and Disposal Areas Protection Device

The Contractor shall establish storm water control structures around the staging, parking, material stockpiled areas, borrow and disposal areas, [and [concrete] [asphalt] batch plant]. A graveled stabilized area or sediment log is acceptable. The Contractor's SWPPP shall show these locations on the vicinity map and/or site drawings and identify the applicable storm water control devices. The Contractor shall inspect and maintain the control structures at these locations.

3.4.5 Rock Berm or Check Dam

Rock Berm or Check Dam is acceptable control structure along stream or steeply sloped or barren swales. The control structure shall have open graded rock of 4 to 8 inches diameter. The graded rock shall be secured with woven sheath of 1-inch diameter opening (maximum) and wire diameter of 20 gauge (minimum). Sediment at 1/3 height of the berm or dam shall be removed.

3.4.6 New and Existing Inlet Protection Device

Sediment Log or gravel filter bags with gravel (size 3 to 5 inch diameter) shall be placed along side with concrete block to prevent sediment from entering new curb and surface inlets at the paved areas, and at existing surface or curb inlet downstream from the disturbed site.

3.4.7 Sand Bag Berm

Sand Bag Berm is acceptable for perimeter control, embankment for sediment basin, sediment barrier for toes of slopes, contributing drainage area greater than 5 acres, slope that is in appropriate for silt fence and straw bale, and as a diversion dike. The Contractor shall inspect sand bag berm after each rain, and the sand bags shall be reshaped or replaced to eliminate sediment in runoff.

3.4.8 Outlet Protection Device

Outlet protection device shall be placed at existing and new drainage outlets to minimize soil scouring by absorbing flow energy to produce non-erosive velocity. See Paragraph, OUTLET PROTECTION OR OUTFALL VELOCITY DISSIPATION DEVICE, this section.

3.4.9 Pipe Slope Drain

Pipe Slope Drain is acceptable for drainage area not to exceed 10 acres. The Contractor shall inspect outlet pipe for erosion and check the pipe for breakage.

3.4.10 Excavated Sediment Trap

Excavated Sediment Trap is acceptable for drainage area of less than 1 acre and with

slope of 5 percent or less, where overflow capacity is needed, and in area of heavy flow of 0.5 CFS or greater. The recommended volume of the sediment trap is 35 cubic yard per acre disturbed. The Contractor shall remove and dispose of sediment when it accumulates to 1/2 of the filter stone (3 to 5 inches diameter of at least 1 foot depth) height.

3.4.10 Diversion or Earth Dike

Diversion Dike shall be placed parallel to existing contours for perimeter control by diverting run-on water away from disturbed area. The dike height shall be at least 1 foot greater than the flow depth for the 10-year storm event. Dike side slopes shall be less than 3 to 1 (0.33 percent grade).

3.4.11 Interceptor Swale

Interceptor Swale shall be placed to divert runoff from disturbed upland area. The flow shall be conveyed to a sediment trapping device. Swale stabilization is required when slope exceeds 2 percent grade.

3.4.12 Geotextile Net

Geotextile net (or fabric) shall be placed along disturbed embankment slope, disturbed area along curbs and gutters, perimeter of disturbed construction site, and disturbed adjacent area of concrete or asphalt pavement. The material shall protect topsoil from wind and water erosion, and promote seed germination. The geotextile net (or fabric) is composed of 100 percent biodegradable material, free of weed seed, and ultra violet light resistant.

3.4.13 Sediment Log

Sediment Log is a sediment control device in lieu of silt fence, straw bale, and rock check dam. It is composed of biodegradable or non-biodegradable material and is weed seed free. The Sediment Log is porous, reusable, holds its shape, and it filters the sediment when storm water pass through the log diameter. It shall be placed in ditch bottoms, swales, waterways, over bare soils turf reinforcement blankets, and around catch basin, storm inlets, drainage outlets, and to retain sediment in the stockpiled area. The standard size Sediment Log is 12-inch diameter or less. For concentrated flow area, a minimum of 20-inch diameter Sediment Log shall be used.

PART 4 STORM WATER MANAGEMENT AND CONTROLS

NOTES: The number and headings of these subsections will vary significantly from project to project. Use as many subsections as necessary to adequately describe erosion and sediment controls for the completed project site. Delete inappropriate controls for the contract. While designing the site layout and grading plans, the design engineer should include features that will limit erosion and control sedimentation once project construction has been completed. Permanent structures may be curbs and gutters, storm drains, drainage ditches, culverts, pavement slopes, etc. Indicate storm frequencies and durations used for design purposes. Subsections may include, but are not limited to: RUNOFF COMPUTATIONS, STORM DRAINAGE SYSTEM, VEGETATIVE BUFFER STRIPS, DRAINAGE SWALES AND DITCHES, DRAINAGE CULVERTS and all subsections discussed in paragraph 3.0 EROSION AND SEDIMENT CONTROLS. All sites for new construction and demolition shall be separately addressed. Units of measure used shall match the construction project.

4.1 RUNOFF COMPUTATIONS

The storm drainage design is based on a [10][__]-year storm frequency and [10][__]-minutes duration with [__] inch per hour rainfall intensity.

4.2 SITE CONDITIONS

The existing site contains approximately [one-third][____] [asphalt] [concrete] paved parking areas and [two-thirds][____] [undeveloped] [turf] [____] area. Estimated existing runoff coefficients vary from [____] to [____]. Future site contains approximately [one-half][____] building and paved areas and [one-half][____] [turf][____] areas[____]. Estimated future runoff coefficients vary from [____] to [____]. [Roof drains will be collected underground and tied into the new storm drain system.]

4.3 PERMANENT EROSION CONTROL STRUCTURES AND STORM WATER TREATMENT UNIT

Permanent drainage structures include [concrete curbs and gutters,] [storm drainage system,] [concrete pavement,] [asphalt pavement,] [drainage swale,] [drainage ditch,] [turfing,] [vegetative strip,][concrete culvert,] [pipe culvert,] will provide erosion control after completion of construction.

[Storm water treatment unit shall has a stainless steel expanded screen opening of at least 4700 microns (4.7 mm or 0.185 inches) to remove sediment.]

4.4 OUTLET PROTECTION OR OUTFALL VELOCITY DISSIPATION DEVICE

NOTES: Identify velocity dissipation or outlet protection device to provide non-erosive flow conditions at the point of surface drainage discharge to swale. New construction and demolition sites shall be addressed separately.

The outlet protection or outfall dissipation device shall provide non-erosive flow conditions at the point of surface water discharge to the ditch or swale. [The proposed storm drain shall be discharged into the existing [___] inches diameter storm drain pipe.] [There will be no permanent outlet protection or velocity dissipation device at this site because [____].] [The [concrete culvert] [pipe culvert] outlets are protected by [rock blanket] [permanent rock rip rap] [grouted rock rip rap] [concrete apron] along [___ Street,] to the [east] [south] [west] [northeast] [____] side of the project site.] [The check dam shall be constructed along the drainage ways for velocity reduction.]

PART 5 BEST MANAGEMENT PRACTICES (BMP)

NOTES: The Contractor shall include BMP Fact Sheets with the Contractor operation specific SWPPP.

The Contractor (and the subcontractors) shall be responsible for eliminating pollutants in storm runoff from the project site. The Contractor (and subcontractors) shall be responsible for installing and maintaining BMP to minimize storm water pollution. The Contractor operation specific SWPPP shall, as a minimum, identify BMP on Construction Practices (Dewatering Operations, Paving Operations, Structure Construction and Painting); Material Management (Material Delivery and Storage, Material Use, Spill Prevention and Control), Waste Management (Solid Waste Management, Hazardous Waste Management, Contaminated Soil Management, Concrete Waste, Sanitary/Septic Waste Management), Vehicle and Equipment Management (Vehicle and Equipment Cleaning, Vehicle and Equipment Fueling, Vehicle and Equipment Maintenance), Dust Control for Various Site Conditions (Non-Traffic Disturbed Areas, Disturbed Areas Subject to Traffic, Material Stock Pile Stabilization, Clearing/Excavation, Demolition, Truck Traffic on Unpaved Road, Mud/Dirt Carry-Out), and Contractor Training (Employee and Subcontractor Training).

5.1 CONSTRUCTION PRACTICES

Dewatering Operations: The Contractor (and subcontractor) shall prevent discharge of sediment by methods of sediment control, containment, and disposal. In project areas suspected of potential toxic or petroleum products contamination, the water shall be tested to determine method of disposal.

Paving Operations: The Contractor (and subcontractor) shall avoid discharge of pollutants to storm drains by avoiding paving in wet weather or anticipation of such event, storing material in covered containers, covering and berming storage areas, establish control structures, cover on-site storm grates, and worker and subcontractor training.

Structure Construction and Painting: The Contractor (and subcontractor) shall prevent pollutants in storm runoff by covering, or berming material storage areas, keeping job site clean and orderly, using safer alternate products, stabilizing adjacent disturbed areas, storing material in secondary containment, protecting on-site storm drain, establish control structures, and training of workers and subcontractor.

Solid Waste Materials: Trash and uncontaminated construction debris shall be placed in appropriate covered waste containers. Waste containers shall be emptied regularly; they shall not be allowed to overflow. The disposal area of excavated material from project construction shall not be utilized for waste disposal. Routine janitorial service shall be provided for all construction buildings and surrounding grounds. No construction waste materials, including concrete, shall be buried or otherwise disposed of on-site. The Contractor shall brief all on site personnel on good housing keeping and waste minimization.

5.2 MATERIAL MANAGEMENT

Material Delivery and Storage Practice: The Contractor (and subcontractor) shall prevent or reduce discharge of pollutants to storm water by minimizing and on-site storage of hazardous and toxic (HT) materials, storing HT in clearly labeled, corrosion-resistant containers with secondary containment at designated and COR-approved area, conducting frequent inspection, keeping current inventory of construction materials on site, training of workers and subcontractor. The storage of reactive, ignitable or flammable

liquids shall comply with applicable fire codes of the project area. The Contractor shall contact the local Fire Marshal to review site materials, quantities, and proposed storage area to determine specific requirements.

Material Use and Inventory: The common on-site materials are: pesticides and herbicides, fertilizers, detergents, concrete material, petroleum-based products, fertilizers, tar, asphalt, steel reinforcing bars, other hazardous chemicals such as acid, lime, solvents, curing compounds, sealants, paints, glues, fertilizers, steel reinforcing bars, etc. The Contractor (and subcontractor) shall use less hazardous, alternate or environmental friendly material. The Contractor shall have (1) a list of construction materials used on site, (2) a list of materials and associated potential pollutants, and (3) method of storage and containment in the Contractor operation specific SWPPP. The Material Safety Data Sheet for each construction material on-site shall be in the Contractor's field and operation activity specific SWPPP and will be available on request by regulator agency visitors, safety officers, or COR.

Spill Prevention and Control: The Contractor (and subcontractor) shall store HT material in covered containers and inside a fenced area, have temporary fuel storage tank bermed or contained to meet applicable Fire Code, place readily accessible spill clean-up materials, have protocol for stop work immediately, notification, clean-up, labelling, storage and packaging, transportation, disposal, record-keeping, closure activities, and provide training to workers and subcontractor for response to spills.

5.3 WASTE MANAGEMENT

Solid Waste: Solid waste materials (i.e. excess fresh concrete, grout, mortar or uncontaminated debris) shall be placed in covered containers, and recycled, if possible. Trees and shrubs from site clearing shall be used as mulching material, if possible. Packaging materials such as wood, plastic, and paper shall be recycled to the maximum extent possible and not be disposed of in a landfill. The Contractor shall designate waste containers for segregating waste (domestic, metal, aluminum or plastic). Dry paint cans shall be recycled. The Contractor shall designate waste disposal area AM #0001 as approved by Contracting Officer Representative (COR), have routine janitorial service for all structures and surrounding grounds, and have routine schedule to service waste containers. The disposal area of excavated material from project construction shall not be utilized for waste disposal. Personnel on the job site shall be briefed on minimizing disposal to landfill by waste segregation and recycling.

Hazardous and Toxic Waste: All excess on-site material such as paints, solvents, petroleum products (fuel, oil, and grease), herbicides, pesticides, acids for cleaning masonry, concrete curing compounds, sealants, paint strippers, wastes from oil-based paint, and glues could become HT waste. Containers of excess material shall be labeled and managed according to the labels and as recommended by the product manufacturers AM #0001 and as required by applicable Federal, state and local regulations for industrial and hazardous waste package, labeling and transportation. The Contractor shall turn in the contained hazardous waste material for recycling or disposal at a Federal or state permitted Treatment Disposal and Storage (TDS) facility off-base. A waste delivery receipt shall be submitted to the COR to document such delivery and disposal.

NOTE: DELETE IF REGULATED MATERIAL ABATEMENT IS NOT APPLICABLE TO THE PROJECT.

[Buildings to be demolished under this Contract shall require removal of the following regulated materials:] [mercury fluorescent lights], [PCB or TCB/DEPH ballasts], [items containing ozone depleting chemicals], [mercury bulb thermostats], [items containing lead-based paint or pipe joints], [asbestos-containing building material] [items containing CFC] [_____]. [Asbestos-containing materials shall be handled and disposed of in accordance with Section 13280 ASBESTOS ABATEMENT prior to building demolition.] [Lead hazard control activities shall be performed in accordance with Section 13281 LEAD HAZARD CONTROL ACTIVITIES.] [Other regulated materials shall be removed and managed in accordance with Section 13284 REMOVAL, RECYCLING, AND DISPOSAL OF REGULATED MATERIAL.]

Contaminated Soil: If suspicious of soil contamination during soil moving activities, the Contractor (and subcontractor) shall stop work, notify COR, and establish containment to prevent soil transport or runoff from that location. For removal of contaminated soil, a WORK PLAN shall be prepared for COR approval prior to handling and management of the material. The WORK PLAN shall at least include the following: containment, sampling & analyses, notification to regulatory agencies, transportation, worker safety, training & environmental monitoring, disposal, and documentation and record-keeping.

Construction and Concrete Waste: Construction waste or surplus materials, demolition building debris, scrap metal, rubber, plastic, glass, concrete, and masonry products shall be segregated and recycled to minimize landfill disposal. No construction waste shall be buried or disposed of on-site. Concrete waste shall be controlled and minimized by appropriate storage methods for dry and wet materials, and controlling amount of concrete and cement mixed on site. Sweepings from exposed aggregate concrete shall be collected and returned to aggregate stockpile and they shall not be washed into

streets or storm drains. Washout of concrete truck shall be at a designated location that is (1) at least 50 feet from storm drains, open ditches, or water bodies, and (2) surrounded by a containment berm with a temporary pit or sediment trap with impermeable liner for containment and settling of washout. Settled solids and set concrete from the pit or trap shall be removed and disposed of properly. Sediment shall be removed and disposed of in accordance with local regulations, and water from the pit or trap shall be pumped to a sanitary sewer with written approval from the COR.

Sanitary/Septic Waste: On-site sanitary facilities shall be established at a convenient location. Facility location, design, maintenance, and waste collection practices shall be approved by COR and are in accordance with local regulations. The Contractor (and subcontractor) shall have a routine schedule for waste pump out by a licensed hauler. Septic waste treatment system shall have a pre-construction permit from the local health regulating agency and have contract service with a licensed company. Temporary sanitary facilities discharging to sanitary sewer system shall be approved by the operator of the system and properly connected to avoid illicit discharges. Wastewater from water-based paint shall not be discharged as sanitary waste.

Building Exterior Cleaning or High-pressure Wash: Storm drains shall be protected by approved storm water control device. Wash onto dirt area, spade in, settle solids in pit, collect (mop up) and discharge to sanitary sewer (with approval from sewer operator). If the exterior paint contains lead exceeding the levels stated in the Consumer Safety Standard, mercury or mildewcide, the wash water shall be collected and disposed of as HT waste.

Street/Pavement Cleaning: Water used for this activity shall be minimized and sediment basin shall be used to contain wastewater. At completion of construction, the silt shall be removed and disposed of in accordance with applicable regulations, and water from the basin shall be pumped to a sanitary sewer with written approval from the COR.

5.4 VEHICLE AND EQUIPMENT MANAGEMENT

Off-site Vehicle Tracking and Dust Control: The Contractor is required to keep vehicles from tracking soils from the project, borrow, and disposal sites. Temporary parking area(s) to be used 30 calendar days or more for the Contractor's equipment or personal vehicles shall be [paved with temporary asphalt] [a stabilized gravel area] with storm water control device. The temporary parking areas shall be removed by the Contractor upon project completion and restored to the satisfaction of the COR. Sprinkling, chemical treatment, light bituminous treatment, or similar methods shall be used for dust control; see Sections 01355 ENVIRONMENTAL PROTECTION and [01561 DUST CONTROL][01562 DUST CONTROL FOR FORT BLISS]. Materials to be transported by truck or other equipment that promote fugitive particle emissions shall be covered and/or sprayed. Use of sprinkling shall be controlled to prevent runoff.

Vehicle and Equipment Cleaning: Washing shall be performed off site at a commercial washing facility that has an oil/water separator as pre-treatment prior to sanitary sewer connection. If washing must occur on site, the wash area shall have written approval from the COR. The on-site wash area shall be bermed from contact with storm drainage system, and detergent shall be bio-degradable. Wastewater shall drain into a lined sediment basin constructed by the Contractor. After project completion, the Contractor shall clean the basin, test and dispose of sediment, in accordance with applicable regulations and to the satisfaction of the COR. Steam cleaning is prohibited on site because it generates significant pollutant concentrations.

Vehicle and Equipment Fueling: Fueling shall be off-site. If fueling must occur on-site, a written approval shall be obtained from COR. If fueling is allowed by the COR, it shall be at a designated area, at least 50 feet away from drainage courses. Fueling operations shall avoid topping of fuel tank, avoid mobile fueling of mobile construction equipment. Fueling locations shall use secondary containment such as drip pan or drop cloth to catch spill or leak, have a stockpile of cleanup material, and absorbent material for immediate clean-up of small spills. A permit shall be obtained from state or local regulatory agency for all on-site fuel storage tanks. In case of spill, avoid hosing down or burial of spilled fuel. The fuel containers shall meet the industrial standard, labeled and stored in accordance with applicable Federal, state, and local codes.

Vehicle and Equipment Maintenance: Outdoor vehicle or equipment maintenance is a significant potential source of storm water pollution. Activities include engine repair, changing fluids, etc. shall be prohibited on job site.

Vehicle and Equipment Parking: All vehicle or equipment parked on-site shall have drip pan or drip cloth to catch spill or leak. Vehicle or equipment (the Contractor and the subcontractor) shall regularly inspect for leaks and schedule routine maintenance to reduce the potential for leaks.

5.5 EMPLOYEE AND SUBCONTRACTOR TRAINING

The Contractor is responsible to provide training for all workers (including the subcontractor) on the job site. The objectives in training are to provide a clear concept of activities or problems that generate pollutants to storm water, identify solutions (BMPs), promote ownership of the problems and solutions, and integrate feedback into training and BMP implementation. A certificate shall be signed by all trained personnel.

5.6 STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

The complete edited section is the Basic SWPPP and the Contractor shall revise it to a field and operation specific SWPPP. The SWPPP shall be retained at the job site at all times and readily available to inspector in case of site inspection conducted by the regulating agency. The Construction Site Notice shall indicate the location of SWPPP. The SWPPP shall be completed before filing for NOI. It shall be implemented prior to start of soil disturbing activities. It shall be updated, as necessary, to reflect changing site conditions, BMP practices, new operations or areas of responsibility. The SWPPP REVISION RECORD shall be an attachment to the SWPPP.

5.7 SPILL CONTROL AND REPORTING

In case of spill of hazardous, toxic, and radiological waste (HTRW), the Contractor shall stop work, contain spill, notify the COR and Safety Office, and execute spill control per the SPILL CONTROL PLAN as required in specification SECTION 01355 ENVIRONMENTAL PROTECTION. Spill containment, notification, clean-up, restoration, reporting, record-keeping, etc. shall be in accordance with 40 CFR 110, other applicable Federal, state, and local regulations, and to the satisfaction of the COR.

PART 6 TIMING OF CONTROLS AND ACTIVITIES.

NOTES: Discuss the sequence of major activities and how they are related to the pollution prevention measures. Identify situations which are critical to successful construction and pollution prevention, but will not limit the Contractor's ability to determine construction phasing schedule.

The Contractor shall (1) sequence soil disturbing activities to preserve existing vegetation, (2) minimize area of disturbance, (3) establish storm water control devices, (4) do not disturb an area until it is necessary to proceed with field work, (5) stabilize disturbed areas as soon as practicable, (6) delay construction of infiltration measures until the end of project when upstream drainage areas are stabilized and established, (7) maintain storm water control devices until stabilized disturbed areas have achieved final stabilization. Final stabilization depicts soil disturbing activities at the site have been completed and a uniform (e.g. evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of all native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as use of rip rap, gabions, or geotextiles) have been employed.

The Contractor's field and operation specific SWPPP shall (1) sequence major construction activities, (2) discuss erosion and sediment control measures, and (3) sequence temporary or permanent stabilization.

- [- Install [silt fences] [straw bale dike] [sediment log] around perimeter & down slope of construction site.]
- [- Construct stabilized construction entrances.]
- [- Install controls around contractor staging, stockpiled storage, parking, borrow, and disposal area.]
- [- Clearing and Grubbing]
- [- Install inlet protections at all existing storm grates (i.e. curb inlets surface inlets, manholes, etc.)]
- [- Install controls (i.e. rock berm/check/check dam, sediment log, diversion/earth dike) at outfall locations and natural drainage ways down stream from the construction site.]
- [- Regulated Material Abatement from structures to be demolished]
- [- Demolition of structures]
- [- Grading]
- [- Implement Temporary Stabilization on graded areas that have no scheduled field work beyond 14 days]
- [- Construct storm water treatment unit or interceptor]
- [- Construct permanent storm water management structures]
- [- Trenching and excavation for utilities, trenching and excavation]
- [- Cover all excavated or other soil stockpiles with soil retention blankets at the end of each work day and at the threat of precipitation.]
- [- Install inlet protections at all new storm grates (i.e. curb inlets surface inlets, manholes, etc.)]
- [- Backfill the utility trenches in a timely manner to minimize erosion.]
- [- Monitor weather using National Weather Services reports to track conditions and

- alert crews to forecast rainfall or dust storm event and avoid paving, concrete saw cutting, dust or pollutant generating activities.]
- [- Stabilize disturbed soil before rainfall events.]
- [- Paving and other flatwork.]
- [- Implement permanent stabilization.]
- [- Routinely inspect and maintain erosion and sediment structural control structures; evaluate BMP & revise SWPPP for change conditions or field activities; assess and certify non-storm water discharges; maintain field records and training logs; [monitor discharge from concrete batch plant].]
- [- water, fertilize, maintain (mow), reseed (if necessary) the temporary and permanent stabilized area to establish final stabilization .]
- [Remove all controls when the project area has achieved final stabilized and all construction is completed and accepted by the Contracting Officer. After site work completion and prior to project acceptance, the Contractor shall perform I & M of storm control conducted monthly.]

PART 7 COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

NOTES: Identify what has been done to comply with the National Environmental Policy Act of 1969, as amended.

Army Regulation 200-1 requires that all Department of Defense installations and Contractors are required to comply with Federal environmental protection statutes, which includes a provision to observe State, and local environmental regulations. (NOTE: The SWPPP shall discuss documentation in compliance with the National Environmental Policy Act of 1969, as amended and discussed impacts on endangered and threatened species and their (critical) habitats, archeological, cultural and historical resources and properties, wetlands, floodplains, environmental contamination and compliance, water resources, ecological resource, land use, noise, air quality.)

In compliance with the Clean Water Act, Section 402, a construction site of 0.4 (1 acre) to 2.0 (5.0 acres) in size, or larger, is required to obtain a National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Construction Activities, a LPDES or TPDES Permit to discharge storm water during construction. The Federal Register Notice is published in Volume 63, Number 128, July 6, 1998.

Section 404 of the Clean Water Act regulates discharge of dredge and fill material with jurisdictional Waters of the United States. Project planners shall determine if there is Section 404 implications for the project site. Project footprints shall be reviewed if it crosses drainage water ways or watersheds that are contributing to the Waters of United States. The review process typically involved wetland delineation, mitigation plan and subsequent permit and mitigation requirement during or after construction. The Contractor shall be responsible for implementing the mitigation required by the issued 404 permit.

Section 401 of the Clean Water Act regulates the on-site sewerage discharge. If on-site sewerage system is in the project, a pre-construction permit shall be obtained from the state, or regional Environmental Quality Office, or County Health Department.

In compliance with the National Environmental Policy Act of 1969, as amended, the [[Environmental Assessment] [Environmental Impact Statement] entitled [_____] dated [_____] has been prepared]] [[Record of Environmental Decision (REC) dated _____] has been prepared for this proposed action]]. Findings include [discussions on endangered and threatened species and their critical habitats, contact with US Fish and Wildlife Service to determine protection measures] [discussions on cultural and historical properties and memorandum from SHPO] [discussions on noise impact] [discussions on whether project site encroaching upon floodplains and wetlands and impact] [discussions on air quality impact] [discussions on environmental compliance issues]. [This facility will have an on-site sewerage treatment system and the Contractor shall obtain a pre-construction permit prior to start work.] [The Contractor shall not start field work until the Section 404 permit issue is resolved and a 404 permit is issued. The permit in compliance with Clean Water Act, Section 404 is issued with mitigation considerations [_____] to be implemented by the Contractor.] In compliance with Clean Water Act, Section 402, the Contractor and the subcontractor shall conform with all applicable NPDES, and [TPDES][LPDES][NPDES] General Permit. In addition, the Contractor (including the subcontractor shall comply with applicable requirements and implement the Storm Water Pollution Prevention Plan and BMP measures prior to commencing soil disturbing activities.

PART 8 MAINTENANCE AND INSPECTION PROCEDURES

The Contractor shall designate a Storm Water Inspector on-site to perform SWPPP quality control. All BMP and control structures shall be inspected at least once every fourteen (14) calendar days and within twenty-four (24) hours following any storm event of 0.5 inch or greater. The Contractor Designated SWPPP Inspector shall have a basic knowledge of the engineering principles in reducing pollutants in storm water, past experience and thoroughly understand the requirements of the Storm Water Discharge Construction Permit, BMP, Government contractual, and SWPPP requirements, worker training, storm control device inspection and maintenance, SWPPP revision, documentation and record-keeping.

Inspection of erosion and soil loss from the outfall and perimeter of the site. Temporary erosion control measures shall be inspected for bare spots and washouts. Discharge points shall be inspected for signs of erosion or sediment. Locations where vehicles enter and leave the site shall be checked for signs of off-site sediment tracking, including erosion control structure at contractor staging, material borrow, disposal, and stockpiled areas. The Contractor shall continually review the Best Management Practices (BMP) and effectiveness of SWPPP program. All deficiencies shall be corrected and recorded in SECTION 01421R - SWPPP INSPECTION AND MAINTENANCE REPORT and a current copy shall be provided to the COR. Corrections to these problems shall be implemented within seven (7) calendar days. After final stabilization has been achieved, the Contractor shall inspect the site once a month until final inspection and project acceptance by the COR.

PART 9 LIST OF ON-SITE MATERIALS AND OTHER POLLUTANT SOURCES

The Contractor brought onto the job site the following construction material: [____], and the following waste [____] is anticipated. The BMP to reduce pollutants in storm runoff includes [____].

[Other pollutant sources include storm water discharges from Concrete (or Asphalt) Batch Plant. The method of pollutant control includes [____].]

PART 10 PROHIBITION ON NON-STORM WATER DISCHARGES

In accordance with the Federal Register, Volume 63, No.128, July 6, 1998 Notices, non-storm water discharge is prohibited during construction of the project, except for a list of non-storm water discharges. The following list of non-storm water discharges from active construction site is allowed and is developed based on the above guideline.

- fire fighting activities,
- fire hydrants flushings,
- vehicle wash waters which do not contain detergent or leaked fluids
- dust control runoff to minimize off-site tracking of vehicles,
- potable water sources including waterline flushings,
- routine external building wash down which does not use detergents and the exterior paint that does not contain mercury, lead, cadmium, and mildewcides,
- pavement wash waters where spills or leaks do not contain hazardous, toxic, radiological material or detergent,
- air conditioning condensate,
- uncontaminated spring or ground water,
- foundation and footing drains which do not contain contaminated process materials such as solvents

The Contractor designated SWPPP Inspector shall perform routine inspection and record findings in the NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION.

PART 11 CONTRACTOR COMPLIANCE

NOTES: The Contractor shall use this basic SWPPP to prepare a detailed SWPPP that includes both narrative and drawings (Storm Water Control Plans). The detailed SWPPP shall state the following as a minimum: (1) the project start and completion dates, (2) bid options to be executed with the project, (3) sequence of construction activities and pollution control measures, (4) discussion of the Best Management Practices (BMP) and implementation during project execution, (5) identify the list of materials brought on site, (6) runoff computation of each drainage area (see paragraph 4.1), and (7) revised storm water control plans to include all locations that require structural controls (i.e. site entrance and exit, staging, stockpiled, borrow, and disposal areas) and the type of storm control structures.

11.1 SWPPP AND NOTICE OF INTENT (NOI)

NOTES: Select the appropriate environmental office. Select "NPDES" and "EPA Region 6, Dallas, Texas" for projects in New Mexico.

The Contractor shall use this section to prepare a field and operation activity specific SWPPP that includes both narrative and drawings (preferable size 11" by 17") and also in

electronic format compatible with the contract requirements. The Contractor SWPPP (both narrative and revised drawings) shall be submitted for review and approval. The Contractor's SWPPP shall, as a minimum, include the following: (1) each area of construction, describe each physical location & LATITUDE and LOGITUDE of each area; (2) the project start and completion dates; (3) sequence of construction activities and pollution control measures; (4) Best Management Practices (BMP); 5) list of on-site construction materials, methods of storage, & pollution control measures; (6) each construction area runoff coefficient; (7) revise SWPPP drawings depict storm control devices (i.e. perimeter, down grade, inlet & outfall controls, site stabilized entrance/exit, Contractor staging & parking, stockpiled, borrow, and disposal areas), limit of clearing and grubbing, haul route, surface water flow direction arrows, site direction arrow, and legend; (9) name and qualification of a Designated SWPPP Inspector to inspect, maintain/repair erosion control structures, record findings and subsequent actions, evaluate BMP and revise SWPPP, assess non-storm or monitor concrete/asphalt plant discharges; (10) record start/stop dates for temporary/permanent ceasing of major construction activities (clearing & grubbing; grading, trenching & excavation; dirt moving, etc.); start dates of temporary and permanent stabilization; repair dates for control structures; release dates of reportable quantities (RQ) for oil and hazardous substances per 40 CFR Parts 110, 117 and 302; repair date of control device; (11) Contractor on-site training to workers; (12) SWPPP revision date for changed site conditions, operation, and BMP; (13) prepare a NOI for the Contractor (who is responsible for day-to-day operation) and submit it at least 2 days prior to commencing work: (14) prepare a separate NOI for the Government's signatory because the Government is an operator who has control over construction plans and specifications, and the Government is responsible for the initial NOI fee. The mailing addresses for NOI submittal are listed with the NOI form in the attachment.

The Contractor shall provide SWPPP (including the revised Storm Water Control Plans) and all necessary attachment (see PART 12) for approval.

11.1.1 On-Site Construction Document And Record-Keeping

A copy of each of the following shall be maintained at the project site at all times: the USACE approved SWPPP with all required attachmen LPDES General Permit, and the Project Site Notice.

The Contractor shall post a Project Site Notice near the main entrance of each construction access point. The Site Notice shall have the following information: a copy of NOI that has an authorization number issued by TCEQ (for each co-permittee, the Government and the Contractor), a brief project description, name and telephone number of an operator's representative (for each Contractor & the Government), and the location of SWPPP.

All records pertaining to LPDES permit shall be maintained for a minimum of three (3) years from the date that a NOT is submitted.

11.1.2 LPDES General Permit Fees And Fines For Non-Compliance

The Contractor is responsible for all fees pertaining to the storm water construction permit for both the Contractor and the Government. Any fines levied by regulatory agencies regarding non-compliance with LPDES regulations or the requirements of this Section shall be paid by the Contractor.

11.2 NOTICE OF TERMINATION (NOT)

No later than 30 working days after completion of final stabilization and approval by the COR, the Contractor shall prepare copies of the Notice of Termination (NOT) separately, for the Contractor and the Government. The Contractor shall submit the Contractor's NOT for large construction site. The Contractor shall prepare the Government NOT form to the COR for a signature of an authorized person from the Government, and the Government NOT to LDEQ. A copy of the Government's NOT and the Contractor's NOT shall be provided to the COR. For small construction sites, the Contractor shall submit a site completion report to LDEQ.

11.3 NOTIFICATION TO MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

A copy of each NOI & NOT (for large construction site), a copy of NOC (Notice of Change is required when relevant information of the initial NOI needs changes), a copy of Construction Site Notice (applicable for small construction site) shall be sent to MS4. For some projects, there is a possibility of more than one MS4. The Contractor shall notify all MS4 within the project site.

The MS4 for Fort Polk is ENRMD Storm Water Program, POC is (Nick Lownes, telephone: 337-531-4278). The Contractor shall verify notificaiton requirement at Fort Polk.

PART 12 ATTACHMENTS

The Contractor shall provide the following attachments in the Contractor field and operation activity specific SWPPP. The list of attachments shall include CONSTRUCTION SITE NOTICE, CONTRACTOR NOTICE OF INTENT (NOI), GOVERNMENT NOTICE OF INTENT (NOI), CONTRACTOR NOTICE OF TERMINATION (NOT), GOVERNMENT NOTICE OF TERMINATION (NOT), CONTRACTOR STORM WATER CONTROL INSPECTION AND MAINTENANCE REPORT, TRAINED CONTRACTOR PERSONNEL LOG, OPERATOR (CONTRACTOR/ SUBCONTRACTOR) CERTIFICATION OF COMPLIANCE FOR [NP LPDES, RECORD OF SWPPP REVISION, RECORD OF MAJOR CONSTRUCTION ACTIVITIES (Grading, Ceasing/Resuming Construction, temporary or permanent stabilization), CONTRACTOR CERTIFICATION FOR SWPPP, RESPONSIBLE PARTIES FOR SITE POLLUTION PREVENTION MEASURES (identify the Contractor Storm Water Pollution Prevention site inspector name and qualifications, other responsible parties), NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION, AUTHORIZED SIGNATORY, [NOTE: if applicable, CONCRETE BATCH FACILITIES - DISCHARGE MONITORING REPORT].

The Basic SWPPP shall include attachment of LPDES General Permit, the Government NOI and incomplete NOT. The Government will not initiate a NOI until a Contractor's operation specific SWPPP is reviewed and approved.

-- End of Section --

SECTION 02220

DEMOLITION
05/02
AMENDMENT NO. 0001

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI A10.6 (1990) Safety Requirements for Demolition Operations

AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)

ARI Guideline K (1997) Containers for Recovered Fluorocarbon Refrigerants

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 61-SUBPART M National Emission Standard for Asbestos

40 CFR 82 Protection of Stratospheric Ozone; Refrigerant Recycling

49 CFR 173.301 Shipment of Compressed Gas Cylinders

U.S. DEFENSE LOGISTICS AGENCY (DLA)

DLA 4145.25 (June 2000) Storage and Handling of Liquefied and Compressed Gases and Their Full and Empty Cylinders

U.S. DEPARTMENT OF DEFENSE (DOD)

DOD 4000.25-1-M Requisitioning and Issue Procedures

MIL-STD-129 (Rev. N) Marking for Shipment and Storage

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

1.2 GENERAL REQUIREMENTS

Do not begin demolition until authorization is received from the Contracting Officer. Remove rubbish and debris from the project site; do not allow accumulations inside or outside the buildings. The work includes demolition, salvage of identified items and materials, and removal of resulting rubbish and debris. Rubbish and debris shall be removed from Government property daily, unless otherwise directed, to avoid accumulation at the demolition site. Materials that cannot be removed daily shall be stored in areas specified by the Contracting Officer. In the interest of occupational safety and health, the work shall be performed in accordance with EM 385-1-1, Section 23, Demolition, and other applicable Sections. In the interest of conservation, salvage shall be pursued to the maximum extent possible (in accordance with Section 01572 CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT).

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-03 Product Data

Work Plan; G, RE

The procedures proposed for the accomplishment of the work. The procedures shall provide for safe conduct of the work, including procedures and methods to provide necessary supports, lateral bracing and shoring when required, careful removal and disposition of materials specified to be salvaged, protection of

property which is to remain undisturbed, coordination with other work in progress, and timely disconnection of utility services. The procedures shall include a detailed description of the methods and equipment to be used for each operation, and the sequence of operations in accordance with EM 385-1-1. This demolition work plan shall identify method of demoltion, equipment, and processing technique. The Contractor shall submit this plan in accordance with Section 01572 CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT and the attached MILITART BASE CLOSURE HANDBOOK, a Guide to Construction and Demolition Material Recovery, dated January 2002.

SD-07 Certificates

Demolition plan; G

Notifications; G

SD-11 Closeout Submittals

Receipts

1.4 REGULATORY AND SAFETY REQUIREMENTS

Comply with federal, state, and local hauling and disposal regulations. In addition to the requirements of the "Contract Clauses," safety requirements shall conform with ANSI A10.6.

1.4.1 Notifications

AM #0001 The Contractor shall notify the Louisiana Department of Environmental Quality (LDEQ) at least 10 working days before start any building disturbance activity. The Contractor shall use the appropriate notification form as required by LDEQ. Prior to submitting notification to the LDEQ, the Contractor shall allow adequate time for review and approval of the prepared notification by the Fort Polk Environmental and Natural Resources Management Division (ENRMD), Compliance Management Branch (CMB). A detailed discussion on notification is attached with ASBESTOS MANAGEMENT PLAN in Section 13280 ASBESTOS ABATEMENT.

1.4.2 Receipts

Submit a shipping receipt or bill of lading for all containers of ozone depleting substance (ODS) shipped to recycling and reuse center.

1.5 DUST AND DEBRIS CONTROL

Prevent the spread of dust and debris and avoid the creation of a nuisance or hazard in the surrounding area. Do not use water if it results in hazardous or objectionable conditions such as, but not limited to, ice, flooding, or pollution.

1.6 PROTECTION

1.6.1 Traffic Control Signs

Where pedestrian and driver safety is endangered in the area of removal work, use traffic barricades with flashing lights. Anchor barricades in a manner to prevent displacement by wind. Notify the Contracting Officer Representative (COR) prior to beginning such work.

1.6.2 Existing Work

Before beginning any demolition work, the Contractor shall survey the site and examine the drawings and specifications to determine the extent of the work. The Contractor shall take necessary precautions to avoid damage to existing items to remain in place, to be reused, or to remain the property of the Government; any damaged items shall be repaired or replaced as approved by the Contracting Officer. The Contractor shall coordinate the work of this section with all other work and shall construct and maintain shoring, bracing, and supports as required. The Contractor shall ensure that structural elements are not overloaded and shall be responsible for increasing structural supports or adding new supports as may be required as a result of any cutting, removal, or demolition work performed under this contract. Do not overload pavements to remain. Provide new supports and reinforcement for existing construction weakened by demolition or removal work. Repairs, reinforcement, or structural replacement must have COR approval.

1.6.3 Not Used

1.6.4 Trees

Trees within the project site shall be managed in accordance with Section 01355 Environmental Protection. Trees which are indicated to be left in place, shall be protected by a 6 foot high fence. The fence shall be securely erected at the drip line or 5 feet from the trunk, whichever is greater, of individual trees or follow the outer perimeter of branches of clumps of trees. Any tree designated to remain that is damaged during the work under this contract shall be replaced in kind or as approved by the Contracting Officer.

1.6.5 Facilities

Protect electrical and mechanical services and utilities. Where removal of existing utilities and pavement is specified or indicated, provide approved barricades, temporary covering of exposed areas, and temporary services or connections for electrical and mechanical utilities. Floors, roofs, walls, columns, pilasters, and other structural components that are designed and constructed to stand without lateral support or shoring, and are determined to be in stable condition, shall remain standing without additional bracing, shoring, or lateral support until demolished, unless directed otherwise by the Contracting Officer. The Contractor shall ensure that no elements determined to be unstable are left unsupported and shall be responsible for placing and securing bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, or demolition work performed under this contract.

1.6.6 Protection of Personnel

During the demolition work the Contractor shall continuously evaluate the condition of the structure being demolished and take immediate action to protect all personnel working in and around the demolition site. No area, section, or component of floors, roofs, walls, columns, pilasters, or other structural element will be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while workmen remove debris or perform other work in the immediate area.

1.7 BURNING

The use of burning at the project site for the disposal of refuse and debris will not be permitted.

1.8 Not used

1.9 RELOCATIONS

Perform the removal and reinstallation of relocated items as indicated with workmen skilled in the trades involved. Repair items to be relocated which are damaged or replace damaged items with new undamaged items as approved by the Contracting Officer.

1.10 Required Data

Demolition plan shall include procedures for careful removal and disposition of materials specified to be salvaged, coordination with other work in progress, a disconnection schedule of utility services, a detailed description of methods and equipment to be used for each operation and of the sequence of operations.

1.11 Environmental Protection

The work shall comply with the requirements of Section 01355 ENVIRONMENTAL PROTECTION.

1.12 USE OF EXPLOSIVES

Use of explosives will not be permitted.

1.13 AVAILABILITY OF WORK AREAS

Areas in which the work is to be accomplished will be determined with in the pre-construction meeting and a written statement submitted for approval.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 EXISTING FACILITIES TO BE REMOVED

3.1.1 Structures

Existing structures indicated shall be removed completely. Sidewalks, curbs, gutters, signs, fencing, and street light bases shall be removed as indicated.

3.1.2 Utilities and Related Equipment

Remove existing utilities, as indicated and terminate in a manner conforming to the nationally recognized code covering the specific utility and approved by the Contracting Officer. When utility lines are encountered that are not indicated on the drawings, the Contracting Officer shall be notified prior to further work in that area. Remove meters and related equipment and deliver to a location in accordance with instructions of the Contracting Officer. If utility lines are encountered that are not shown on drawings, contact the Contracting Officer for further instructions.

3.1.3 Paving and Slabs

Remove concrete and asphaltic concrete paving and slabs, excluding aggregate base, as indicated. Provide neat sawcuts at limits of pavement removal as indicated. Pavement shall be removed in accordance with Section 02221 PAVEMENT REMOVAL. Concrete and asphalt pavement rubble **AM #0001 free of regulated materials (ACM, LBP and other regulated materials)** shall be disposed of at the Fort Polk collection facility on California Avenue, north of 4th Street. **AM #0001 Concrete contaminated with asbestos containing tile and mastic shall not be disposed of at the Fort Polk collection (recycling) facility.**

3.1.4 Not Used

3.1.5 Not Used

3.1.6 Not Used

3.1.7 Not Used

3.1.8 Not Used

3.1.9 Not Used

3.1.10 Not Used

3.1.11 Not Used

3.2 FILLING

Holes, open basements and other hazardous openings shall be filled in accordance with Section 02300 EARTHWORK.

3.3 DISPOSITION OF MATERIAL

3.3.1 Title to Materials

Except where specified in other sections, all materials and equipment removed, and not reused, shall become the property of the Contractor and shall be removed from Government property. Title to materials resulting from demolition, and materials and equipment to be removed, is vested in the Contractor upon approval by the Contracting Officer of the Contractor's demolition and removal procedures, and authorization by the Contracting Officer to begin demolition. The Government will not be responsible for the condition or loss of, or damage to, such property after contract award. Materials and equipment shall not be viewed by prospective purchasers or sold on the site.

3.3.2 Reuse of Materials and Equipment

Remove and store materials and equipment indicated to be reused or relocated to prevent damage, and reinstall as the work progresses.

3.3.3 Salvaged Materials and Equipment

Remove materials and equipment that are specified to be removed by the Contractor and that are to remain the property of the Government, and deliver to a storage site , as directed within 2 miles of the work site.

Contractor shall salvage items and material to the maximum extent possible.

Material salvaged for the Contractor shall be stored as approved by the Contracting Officer and shall be removed from Government property before completion of the contract. Material salvaged for the Contractor shall not be sold on the site.

Salvaged items to remain the property of the Government shall be removed in a manner to prevent damage, and packed or crated to protect the items from damage while in storage or during shipment. Items damaged during removal or storage shall be repaired or replaced to match existing items. Containers shall be properly identified as to contents. The following items reserved as property of the Government shall be delivered to the areas designated by the Contracting Officer:
Caution light and controller at 3rd Street and Alabama Ave.

The following items reserved as property of the using service shall be removed prior to commencement of work under this contract: [_____].
Historical items shall be removed in a manner to prevent damage. The following historical items shall be delivered to the Government for disposition: Corner stones, contents of corner stones, and document boxes wherever located on the site.

3.3.4 Not Used

3.3.5 Not Used

3.3.6 Not Used

3.3.7 Unsalvageable Material

Concrete and asphalt rubble shall be disposed of at the Fort Polk collection facility on California Avenue. Masonry, and other noncombustible material, except concrete permitted to remain in place, shall be disposed of in a disposal area located off of Government controlled property at the Contractors expense and responsibility. Combustible material shall be disposed of in a sanitary fill area located off Government-controlled property.

3.4 CLEANUP

Debris and rubbish shall be removed from basement and similar excavations. Debris shall be removed and transported in a manner that prevents spillage on streets or adjacent areas. Local regulations regarding hauling and disposal shall apply.

3.4.1 Debris and Rubbish

Debris and rubbish shall be removed from basement and similar excavations. Debris shall be removed and transported in a manner that prevents spillage on streets or adjacent areas. Local regulations regarding hauling and disposal shall apply.

-- End of Section --

SECTION 13280A

ASBESTOS ABATEMENT
11/01
AMENDMENT NO.0001

PART 1 GENERAL

The Contractor shall obtain previous asbestos survey data on structures identified for abatement/demolition. AM # 0001 Previous asbestos survey data is located in the Record of Environmental Consideration (REC) as furnished by the installation environmental office to the Contracting Officer Representative (COR). The previous survey data shall be used as a guideline to prepare Asbestos Survey Work Plan for building inspection, asbestos sample collection, verification, and laboratory analysis. The Contractor is ultimately responsible for the location, type, quantities of asbestos containing materials (ACM), the complete identification of ACM, the total abatement and management of ACM in accordance with this section prior to demolition. The Contractor shall also reference the attached ASBESTOS MANAGEMENT PLAN for JOINT READINESS TRAINING CENTER AND FORT POLK (FINAL), dated 2003 for execution of work, AM #0001 (Appendix O Requirements for the Third Party Asbestos Oversight Contractor and other parts of this document that are applicable shall be implemented). The list of structures for abatement and demolition shall be verified by the Contractor with DPW and through a site visit.

AM #0001 _____ The Contractor shall perform asbestos survey AM #0001 building inspection, sample collection and laboratory analysis in accordance with EP 1110-1-30, Pre-design Asbestos/Lead Survey Standard Scope of Work and EP 1110-1-22, Asbestos Surveys and Assessments AM #0001 and the Contractor prepared ASBESTOS SURVEY WORK PLAN as reviewed and approved by the COR. AM #0001 Prior to initiation of abatement, the Contractor shall prepare an ASBESTOS HAZARD ABATEMENT PLAN (AHAP) that identifies types & conditions of ACM (use format of TABLE 1-A, 1-B, etc. for describe each item), floor plans depict ACM locations, photos of ACM, laboratory analytical results, inspection field notes, abatement quantity, method of abatement, abatement containment layout and AM #0001 SET-UP details (reference EP-1110-1-11 Asbestos Abatement Guideline Detail sheets), OSHA Work Classification & work practices, disposal requirements & disposal facility, worker protection plan (include medical surveillance program and medical examination, respiratory protection equipment & fit-testing, physical protection gear, worker exposure monitoring), environmental protection plan (air monitoring requirements (initial, during abatement and final clearance). Reference EP 1110-1-23 Asbestos Abatement Air Monitoring Standard Scope of Work. The ASBESTOS HAZARD ABATEMENT PLAN (AHAP) shall be submitted to the USACE Area Office for review and approval. AM #0001 The AHAP shall be prepared by an asbestos designer who is currently certified in the State of Louisiana. The AHAP shall be re-submitted for COR approval by the Contractor when it deviates from the approved AHAP. Such deviations include but not limit to the following: subcontractor or asbestos abatement worker, work practice, containment method, and monitoring protocol, etc.

Other submittals shall include the current state permit or license for disposal facility, qualifications and current training certifications for Contractor or supervisor, industrial hygienist and industrial hygiene technician, workers, laboratory qualifications, laboratory current state license, laboratory national accreditation, AM # 0001 exposure assessment and air monitoring firm IHT and CIH, and other required submittals stated in this section (including SAFETY & HEALTH PROGRAM AND PLAN, EM 385-1-1 Activity Hazard Analysis, etc).

Notification to regulatory agency and manifest to disposal facility shall be prepared by the Contractor. The Contractor shall provide adequate time for signature AM # 0001 _____, reference paragraph Notification in section 02220 DEMOLITION. After project completion, the Contractor shall submit a ABATEMENT CLOSURE REPORT to include at least the following: worker & environmental monitoring data for pre-abatement, during abatement, final clearance results; abatement records and engineering practices, disposal document (notification or waste receipts from disposal facility); and other documents pertaining to execution of work under this section.

The Contractor is responsible for all fees (including manifest, notification, training, physical examination, etc.) associated with work under this section. Any fines levied by regulatory agencies regarding non-compliance shall be paid by the Contractor. All documents pertaining to work performed shall be kept by the Contractor and the Area Office per regulatory requirements. The Contractor shall comply with Federal, state and local regulations in performing work describe in this section. The Contractor shall review this section in its entirety and perform work required. All reference documents are available in <http://synectics.net/resources>

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

- ANSI Z87.1 (1989; Errata; Z87.1a) Occupational and Educational Eye and Face Protection
- ANSI Z88.2 (1992) Respiratory Protection
- ANSI Z9.2 (1979; R 1991) Fundamentals Governing the Design and Operation of Local Exhaust Systems

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- ASTM C 732 (1995) Aging Effects of Artificial Weathering on Latex Sealants
- ASTM D 1331 (1989; R 1995) Surface and Interfacial Tension of Solutions of Surface-Active Agents
- ASTM D 2794 (1993; R 1999el) Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
- ASTM D 4397 (1996) Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications
- ASTM D 522 (1993a) Mandrel Bend Test of Attached Organic Coatings
- ASTM E 119 (2000) Fire Tests of Building Construction and Materials
- ASTM E 1368 (2000) Visual Inspection of Asbestos Abatement Projects
- ASTM E 736 (1992) Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members
- ASTM E 84 (2000a) Surface Burning Characteristics of Building Materials
- ASTM E 96 (2000) Water Vapor Transmission of Materials

COMPRESSED GAS ASSOCIATION (CGA)

- CGA G-7 (1990) Compressed Air for Human Respiration
- CGA G-7.1 (1997) Commodity Specification for Air

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

- NFPA 701 (1999) Methods of Fire Tests for Flame-Resistant Textiles and Films

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

- NIOSH Pub No. 84-100 (1984; Supple 1985, 1987, 1988 & 1990) NIOSH Manual of Analytical Methods

U.S. ARMY CORPS OF ENGINEERS (USACE)

- EM 385-1-1 (1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

- EPA 340/1-90/018 (1990) Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance
- EPA 340/1-90/019 (1990) Asbestos/NESHAP Adequately Wet Guidance
- EPA 560/5-85-024 (1985) Guidance for Controlling Asbestos-Containing Materials in Buildings

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

- 29 CFR 1910 Occupational Safety and Health Standards

29 CFR 1926	Safety and Health Regulations for Construction
40 CFR 61	National Emission Standards for Hazardous Air Pollutants
40 CFR 763	Asbestos
42 CFR 84	Approval of Respiratory Protective Devices
49 CFR 107	Hazardous Materials Program Procedures
49 CFR 171	General Information, Regulations, and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
49 CFR 173	Shippers - General Requirements for Shipments and Packagings

UNDERWRITERS LABORATORIES (UL)

UL 586	(1996; Rev thru Aug 1999) High-Efficiency, Particulate, Air Filter Units
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1.2 DEFINITIONS

- a. Adequately Wet: A term defined in 40 CFR 61, Subpart M, and EPA 340/1-90/019 meaning to sufficiently mix or penetrate with liquid to prevent the release of particulate. If visible emissions are observed coming from asbestos-containing material (ACM), then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wetted.
- b. Aggressive Method: Removal or disturbance of building material by sanding, abrading, grinding, or other method that breaks, crumbles, or disintegrates intact asbestos-containing material (ACM).
- c. Amended Water: Water containing a wetting agent or surfactant with a surface tension of at least 29 dynes per square centimeter when tested in accordance with ASTM D 1331.
- d. Asbestos: Asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.
- e. Asbestos-Containing Material (ACM): Any materials containing more than one percent asbestos.
- f. Asbestos Fiber: A particulate form of asbestos, 5 micrometers or longer, with a length-to-width ratio of at least 3 to 1.
- g. Authorized Person: Any person authorized by the Contractor and required by work duties to be present in the regulated areas.
- h. Building Inspector: Individual who inspects buildings for asbestos and has EPA Model Accreditation Plan (MAP) "Building Inspector" training; accreditation required by 40 CFR 763, Subpart E, Appendix C.
- i. Certified Industrial Hygienist (CIH): An Industrial Hygienist certified in the practice of industrial hygiene by the American Board of Industrial Hygiene.
- j. Class I Asbestos Work: Activities defined by OSHA involving the removal of thermal system insulation (TSI) and surfacing ACM.
- k. Class II Asbestos Work: Activities defined by OSHA involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos - containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastic. Certain "incidental" roofing materials such as mastic, flashing and cements when they are still intact are excluded from Class II asbestos work. Removal of small amounts of these materials which would fit into a glovebag may be classified as a Class III job.
- l. Class III Asbestos Work: Activities defined by OSHA that involve repair and maintenance operations, where ACM, including TSI and surfacing ACM, is likely to be disturbed. Operations may include drilling, abrading, cutting a hole, cable pulling, crawling through tunnels or attics and spaces above the ceiling, where

- asbestos is actively disturbed or asbestos-containing debris is actively disturbed.
- m. Class IV Asbestos Work: Maintenance and custodial construction activities during which employees contact but do not disturb ACM and activities to clean-up dust, waste and debris resulting from Class I, II, and III activities. This may include dusting surfaces where ACM waste and debris and accompanying dust exists and cleaning up loose ACM debris from TSI or surfacing ACM following construction.
 - n. Clean room: An uncontaminated room having facilities for the storage of employees' street clothing and uncontaminated materials and equipment.
 - o. Competent Person: In addition to the definition in 29 CFR 1926, Section .32(f), a person who is capable of identifying existing asbestos hazards as defined in 29 CFR 1926, Section .1101, selecting the appropriate control strategy, has the authority to take prompt corrective measures to eliminate them and has EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training; accreditation required by 40 CFR 763, Subpart E, Appendix C.
 - p. Contractor/Supervisor: Individual who supervises asbestos abatement work and has EPA Model Accreditation Plan "Contractor/Supervisor" training; accreditation required by 40 CFR 763, Subpart E, Appendix C.
 - q. Critical Barrier: One or more layers of plastic sealed over all openings into a regulated area or any other similarly placed physical barrier sufficient to prevent airborne asbestos in a regulated area from migrating to an adjacent area.
 - r. Decontamination Area: An enclosed area adjacent and connected to the regulated area and consisting of an equipment room, shower area, and clean room, which is used for the decontamination of workers, materials, and equipment that are contaminated with asbestos.
 - s. Demolition: The wrecking or taking out of any load-supporting structural member and any related razing, removing, or stripping of asbestos products.
 - t. Disposal Bag: A 6 mil thick, leak-tight plastic bag, pre-labeled in accordance with 29 CFR 1926, Section .1101, used for transporting asbestos waste from containment to disposal site.
 - u. Disturbance: Activities that disrupt the matrix of ACM, crumble or pulverize ACM, or generate visible debris from ACM. Disturbance includes cutting away small amounts of ACM, no greater than the amount which can be contained in 1 standard sized glovebag or waste bag, not larger than 60 inches in length and width in order to access a building component.
 - v. Equipment Room or Area: An area adjacent to the regulated area used for the decontamination of employees and their equipment.
 - w. Employee Exposure: That exposure to airborne asbestos that would occur if the employee were not using respiratory protective equipment.
 - x. Fiber: A fibrous particulate, 5 micrometers or longer, with a length to width ratio of at least 3 to 1.
 - y. Friable ACM: A term defined in 40 CFR 61, Subpart M and EPA 340/1-90/018 meaning any material which contains more than 1 percent asbestos, as determined using the method specified in 40 CFR 763, Subpart E, Appendix A, Section 1, Polarized Light Microscopy (PLM), that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent, as determined by a method other than point counting by PLM, the asbestos content is verified by point counting using PLM.
 - z. Glovebag: Not more than a 60 by 60 inch impervious plastic bag-like enclosure affixed around an asbestos-containing material, with glove-like appendages through which material and tools may be handled.
 - aa. High-Efficiency Particulate Air (HEPA) Filter: A filter capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter.
 - bb. Homogeneous Area: An area of surfacing material or thermal system insulation that is uniform in color and texture.
 - cc. Industrial Hygienist: A professional qualified by education, training, and experience to anticipate, recognize, evaluate, and develop controls for

- occupational health hazards.
- dd. Intact: ACM which has not crumbled, been pulverized, or otherwise deteriorated so that the asbestos is no longer likely to be bound with its matrix. Removal of "intact" asphaltic, resinous, cementitious products does not render the ACM non-intact simply by being separated into smaller pieces.
 - ee. Model Accreditation Plan (MAP): USEPA training accreditation requirements for persons who work with asbestos as specified in 40 CFR 763, Subpart E, Appendix C.
 - ff. Modification: A changed or altered procedure, material or component of a control system, which replaces a procedure, material or component of a required system.
 - gg. Negative Exposure Assessment: A demonstration by the Contractor to show that employee exposure during an operation is expected to be consistently below the OSHA Permissible Exposure Limits (PELs).
 - hh. NESHAP: National Emission Standards for Hazardous Air Pollutants. The USEPA NESHAP regulation for asbestos is at 40 CFR 61, Subpart M.
 - ii. Nonfriable ACM: A NESHAP term defined in 40 CFR 61, Subpart M and EPA 340/1-90/018 meaning any material containing more than 1 percent asbestos, as determined using the method specified in 40 CFR 763, Subpart E, Appendix A, Section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.
 - jj. Nonfriable ACM (Category I): A NESHAP term defined in 40 CFR 61, Subpart E and EPA 340/1-90/018 meaning asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in 40 CFR 763, Subpart F, Appendix A, Section 1, Polarized Light Microscopy.
 - kk. Nonfriable ACM (Category II): A NESHAP term defined in 40 CFR 61, Subpart E and EPA 340/1-90/018 meaning any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos, as determined using the methods specified in 40 CFR 763, Subpart F, Appendix A, Section 1, Polarized Light Microscopy, that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
 - ll. Permissible Exposure Limits (PELs):
 - (1) PEL-Time weighted average(TWA): Concentration of asbestos not in excess of 0.1 fibers per cubic centimeter of air (f/cc) as an 8 hour time weighted average (TWA), as determined by the method prescribed in 29 CFR 1926, Section .1101, Appendix A, or the current version of NIOSH Pub No. 84-100 analytical method 7400.
 - (2) PEL-Excursion Limit: An airborne concentration of asbestos not in excess of 1.0 f/cc of air as averaged over a sampling period of 30 minutes as determined by the method prescribed in 29 CFR 1926, Section .1101, Appendix A, or the current version of NIOSH Pub No. 84-100 analytical method 7400.
 - mm. Regulated Area: An OSHA term defined in 29 CFR 1926, Section .1101 meaning an area established by the Contractor to demarcate areas where Class I, II, and III asbestos work is conducted; also any adjoining area where debris and waste from such asbestos work accumulate; and an area within which airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limit.
 - nn. Removal: All operations where ACM is taken out or stripped from structures or substrates, and includes demolition operations.
 - oo. Repair: Overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates, including encapsulation or other repair of ACM attached to structures or substrates. If the amount of asbestos so "disturbed" cannot be contained in 1 standard glovebag or waste bag, Class I precautions are required.
 - pp. Spills/Emergency Cleanups: Cleanup of sizable amounts of asbestos waste and debris which has occurred, for example, when water damage occurs in a building, and sizable amounts of ACM are dislodged. A Competent Person evaluates the site and ACM to be handled, and based on the type, condition and extent of the dislodged material, classifies the cleanup as Class I, II, or III. Only if the material was intact and the cleanup involves mere contact of ACM, rather than disturbance, could there be a Class IV classification.

- qq. Surfacing ACM: Asbestos-containing material which contains more than 1% asbestos and is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.
- rr. Thermal system insulation (TSI) ACM: ACM which contains more than 1% asbestos and is applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain or water condensation.
- ss. Transite: A generic name for asbestos cement wallboard and pipe.
- tt. Worker: Individual (not designated as the Competent Person or a supervisor) who performs asbestos work and has completed asbestos worker training required by 29 CFR 1926, Section .1101, to include EPA Model Accreditation Plan (MAP) "Worker" training; accreditation required by 40 CFR 763, Subpart E, Appendix C, if required by the OSHA Class of work to be performed or by the state where the work is to be performed.
- uu. AM #0001 Wall System Sampling and Reporting Protocol: For wall systems (sheet rock) suspected of containing asbestos, composite wall samples shall be obtained. The wall system composite sample shall contain all sub-components and use EPA 600/R-93/116, 400 POINT COUNT PROCEDURE for analysis. Report analytical results of wall systems by each sub-component (i.e. texture, joint mud, and dry wall). Cost of analyzing wall system with texture, joint mud and dry wall shall be accounted for as a single analytical test. It is similar to the customary practice of analyzing floor systems, in that both sub-components of floor tile and mastic are separately reported.

1.3 DESCRIPTION OF WORK

The Contractor shall determine the ACM abatement method that is the most feasible and has low exposure to workers and the environment. The Contractor shall determine the conditions of ACM floor tile with mastic and ACM roofing material and discuss abatement options (i.e. demolition ACM in-place with structure or separately abated) in the submittal ASBESTOS HAZARD ABATEMENT PLAN. These options shall be evaluated in accordance with Federal, state regulatory agencies, and disposal facility. The abatement method of choice shall be approved by the USACE Area Office. Reference EPA 340/1-92-013, A Guide to Normal Demolition Practices under the Asbestos NESHAP (dated 1992). For ACM AM #0001 survey, sample collection, analysis, reference EP 1110-1-30, Pre-design Asbestos/Lead Survey Standard Scope of Work and EP 1110-1-22, Asbestos Surveys and Assessments. AM #0001 As a minimum, at least three (3) samples shall be collected from each homogenous area identified, and analysis of samples shall be stopped when Asbestos-Containing Material (ACM): any materials containing more than one percent asbestos is encountered.

The work covered by this section includes the removal of asbestos-containing materials (ACM) which are encountered during demolition activities associated with this project and describes procedures and equipment required to protect workers and occupants of the regulated area from contact with airborne asbestos fibers and ACM dust and debris. Activities include OSHA [Class I] [Class II] [Class III] [Class IV] work operations involving ACM. The work also includes containment, storage, transportation and disposal of the generated ACM wastes. More specific operational procedures shall be detailed in the required Accident Prevention Plan and its subcomponents, the Asbestos Hazard Abatement Plan and Activity Hazard Analyses required in paragraph SAFETY AND HEALTH PROGRAM AND PLANS. Reference PART 1.0 GENERAL for requirement.

1.3.1 Abatement Work Tasks

The specific ACM to be abated is identified on the detailed plans and project drawings. A summary of work task data elements for each individual ACM abatement work task to include the appropriate RESPONSE ACTION DETAIL SHEET (item to be abated and methods to be used) and SET-UP DETAIL SHEETS (containment techniques to include safety precautions and methods) is included in Table 1, "Individual Work Task Data Elements" at the end of this section.

1.3.2 Unexpected Discovery of Asbestos

For any previously untested building components suspected to contain asbestos and located in areas impacted by the work, the Contractor shall notify the Contracting Officer (CO) who will have the option of ordering up to [_____] bulk samples to be obtained at the Contractor's expense and delivered to a laboratory accredited under the National Institute of Standards and Technology (NIST) "National Voluntary Laboratory Accreditation Program (NVLAP)" and analyzed by PLM at no additional cost to the

Government. Any additional components identified as ACM that have been approved by the Contracting Officer for removal shall be removed by the Contractor and will be paid for by an equitable adjustment to the contract price under the CONTRACT CLAUSE titled "changes". Sampling activities undertaken to determine the presence of additional ACM shall be conducted by personnel who have successfully completed the EPA Model Accreditation Plan (MAP) "Building Inspector" training course required by 40 CFR 763, Subpart E, Appendix C.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-03 Product Data

Respiratory Protection Program; G, [_____]

Records of the respirator program.

Cleanup and Disposal; G, [_____]

Waste shipment records. Weigh bills and delivery tickets shall be furnished for information only.

AM #0001 ASBESTOS SURVEY WORK PLAN, ASBESTOS HAZARD ABATEMENT PLAN and Detailed Drawings; G, [_____]

Descriptions, detail project drawings, and site layout to include worksite containment area techniques as prescribed on applicable SET-UP DETAIL SHEETS, local exhaust ventilation system locations, decontamination units and load-out units, other temporary waste storage facility, access tunnels, location of temporary utilities (electrical, water, sewer) and boundaries of each regulated area. **AM #0001 The SET-UP DETAILS SHEETS are available in EP-1110-1-11 Asbestos Abatement Guideline Detail sheets (see web site stated in PART 1 GENERAL) The Contractor shall consult with COR on each delivery order for this submittal.**

Materials and Equipment; [____], [_____]

Manufacturer's catalog data for all materials and equipment to be used in the work, including brand name, model, capacity, performance characteristics and any other pertinent information. **AM #0001 The Contractor shall consult with COR on each delivery order for this submittal.** Test results and certificates from the manufacturer of encapsulants substantiating compliance with performance requirements of this specification. Material Safety Data Sheets for all chemicals to be used onsite in the same format as implemented in the Contractor's HAZARD COMMUNICATION PROGRAM. Data shall include, but shall not be limited to, the following items:

- a. High Efficiency Filtered Air (HEPA) local exhaust equipment
- b. Vacuum cleaning equipment
- c. Pressure differential monitor for HEPA local exhaust equipment
- d. Air monitoring equipment
- e. Respirators
- f. Personal protective clothing and equipment
 - (1) Coveralls
 - (2) Underclothing
 - (3) Other work clothing
 - (4) Foot coverings
 - (5) Hard hats
 - (6) Eye protection
 - (7) Other items required and approved by Contractors Designated CIH and Competent Person
- g. Glovebag
- h. Duct Tape

i. Disposal Containers

- (1) Disposal bags
- (2) Fiberboard drums
- (3) Paperboard boxes

j. Sheet Plastic

- (1) Polyethylene Sheet - General
- (2) Polyethylene Sheet - Flame Resistant
- (3) Polyethylene Sheet - Reinforced

k. Wetting Agent

- (1) Amended Water
- (2) Removal encapsulant

l. Strippable Coating

m. Prefabricated Decontamination Unit

n. Other items

o. Chemical encapsulant

p. Chemical encasement materials

q. Material Safety Data Sheets (for all chemicals proposed)

Qualifications; G, [_____]

A written report providing evidence of qualifications for personnel, facilities and equipment assigned to the work.

Training Program; [_____], [_____]

A copy of the written project site-specific training material as indicated in 29 CFR 1926, Section .1101 that will be used to train onsite employees. The training document shall be signed by the Contractor's Designated IH and Competent Person.

Medical Requirements; [_____], [_____]

Physician's written opinion.

Encapsulants; G, [_____]

Certificates stating that encapsulants meet the applicable specified performance requirements.

SD-06 Test Reports

Exposure Assessment and Air Monitoring; G, [_____]

Initial exposure assessments, negative exposure assessments, air-monitoring results, **AM #0001 final clearance results**, and documentation. **AM #0001 All exposure assessment and air monitoring reports shall be signed by a State of Louisiana Certified Industrial Hygienist designated for each delivery order to be excuted under this contract.**

Local Exhaust Ventilation; [_____], [_____]

Pressure differential recordings.

Licenses, Permits and Notifications; G, [_____]

Licenses, permits, notifications, current training certificates for the Contractor, designated CIH, IHT, supervisor, Contractor Competent Person, independent analytical laboratory, **AM #0001 independent exposure assessment and air monitoring firm**, disposal facility, waste hauler.

SD-07 Certificates

Vacuum, Filtration and Ventilation Equipment; [_____], [_____]

Manufacturer's certifications showing compliance with ANSI Z9.2 for:

- a. Vacuums.
- b. Water filtration equipment.
- c. Ventilation equipment.
- d. Other equipment required to contain airborne asbestos fibers.

1.5 QUALIFICATIONS

1.5.1 Written Qualifications and Organization Report

The Contractor shall furnish a written qualifications and organization report providing evidence of qualifications of the Contractor, Contractor's Project Supervisor, Designated Competent Person, supervisors and workers; Designated Certified IH (person assigned to project and firm name); independent testing laboratory (including name of firm, principal, and analysts who will perform analyses); all subcontractors to be used including disposal transportation and disposal facility firms, subcontractor supervisors, subcontractor workers; and any others assigned to perform asbestos abatement and support activities. The report shall include an organization chart showing the Contractor's staff organization for this project by name and title, chain of command and reporting relationship with all subcontractors. The report shall be signed by the Contractor, the Contractor's onsite project manager, Designated Competent Person, Designated IH, designated testing laboratory and the principals of all subcontractors to be used. The Contractor shall include the following statement in the report: "By signing this report I certify that the personnel I am responsible for during the course of this project fully understand the contents of 29 CFR 1926, Section .1101, 40 CFR 61, Subpart M, and the federal, state and local requirements specified in paragraph SAFETY AND HEALTH PROGRAM AND PLANS for those asbestos abatement activities that they will be involved in."

1.5.2 Specific Requirements

The Contractor shall designate in writing, personnel meeting the following qualifications **AM #0001 after consulting with the COR on each delivery order** :

- a. Designated Competent Person: The name, address, telephone number, and resume of the Contractor's Designated Competent Person shall be provided. Evidence that the full-time Designated Competent Person is qualified in accordance with 29 CFR 1926, Sections .32 and .1101, has EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training accreditation required by 40 CFR 763, Subpart E, Appendix C, and is experienced in the administration and supervision of asbestos abatement projects, including exposure assessment and monitoring, work practices, abatement methods, protective measures for personnel, setting up and inspecting asbestos abatement work areas, evaluating the integrity of containment barriers, placement and operation of local exhaust systems, ACM generated waste containment and disposal procedures, decontamination units installation and maintenance requirements, site safety and health requirements, notification of other employees onsite, etc. The duties of the Competent Person shall include the following: controlling entry to and exit from the regulated area; supervising any employee exposure monitoring required by 29 CFR 1926, Section .1101; ensuring that all employees working within a regulated area wear the appropriate personal protective equipment (PPE), are trained in the use of appropriate methods of exposure control, and use the hygiene facilities and decontamination procedures specified; and ensuring that engineering controls in use are in proper operating conditions and are functioning properly. The Designated Competent Person shall be responsible for compliance with applicable federal, state and local requirements, the Contractor's Accident Prevention Plan and Asbestos Hazard Abatement Plan. The Designated Competent Person shall provide, and the Contractor shall submit, the "Contractor/Supervisor" course completion certificate and the most recent certificate for required refresher training with the employee "Certificate of Worker Acknowledgment" required by this paragraph. The Contractor shall submit evidence that this person has a minimum of [2 years] [_____] of on-the-job asbestos abatement experience relevant to OSHA competent person requirements. The Designated Competent Person shall be onsite at all times during the conduct of this project.
- b. Project and Other Supervisors: The Contractor shall provide the name, address, telephone number, and resume of the Project Supervisor and other supervisors who have responsibility to implement the Accident Prevention Plan, including the Asbestos Hazard Abatement Plan and Activity Hazard Analyses, the authority to direct work performed under this contract and verify compliance, and have EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training accreditation required by 40 CFR 763, Subpart E, Appendix C. The Project Supervisor and other supervisors shall provide, and the Contractor shall submit, the

- "Contractor/Supervisor" course completion certificate and the most recent certificate for required refresher training with the employee "Certificate of Worker Acknowledgment" required by this paragraph. The Contractor shall submit evidence that the Project Supervisor has a minimum of [2 years] [_____] of on-the-job asbestos abatement experience relevant to project supervisor responsibilities and the other supervisors have a minimum of [1 year] [_____] on-the-job asbestos abatement experience commensurate with the responsibilities they will have on this project.
- c. Designated Certified Industrial Hygienist: The Contractor shall provide the name, address, telephone number, resume and other information specified below for the Certified Industrial Hygienist (CIH) selected to prepare the Contractor's Asbestos Hazard Abatement Plan, prepare and perform training, direct air monitoring and assist the Contractor's Competent Person in implementing and ensuring that safety and health requirements are complied with during the performance of all required work. The Designated CIH shall be a person who is [board certified in the practice of industrial hygiene] [or] [board eligible (meets all education and experience requirements)] as determined and documented by the American Board of Industrial Hygiene (ABIH), has EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training accreditation required by 40 CFR 763, Subpart E, Appendix C, and has a minimum of [2 years] [_____] of comprehensive experience in planning and overseeing asbestos abatement activities. The Designated CIH shall provide, and the Contractor shall submit, the "Contractor/Supervisor" course completion certificate and the most recent certificate for required refresher training with the employee "Certificate of Worker Acknowledgment" required by this paragraph. The Designated IH shall be completely independent from the Contractor according to federal, state, or local regulations; that is, shall not be a Contractor's employee or be an employee or principal of a firm in a business relationship with the Contractor negating such independent status. A copy of the Designated CIH's current valid ABIH [certification] [confirmation of eligibility in writing from the ABIH] shall be included. The Designated CIH shall visit the site at the start of the abatement activity and at least once per month for the duration of asbestos activities and shall be available for emergencies. In addition, the Designated CIH shall prepare, and the Contractor shall submit, the name, address, telephone numbers and resumes of additional industrial hygiene technicians (IHT) who will be assisting the Designated CIH in performing onsite tasks. IHTs supporting the Designated CIH shall have a minimum of [2 years] [_____] of practical onsite asbestos abatement experience. The IHT shall be completely independent of the Contractor and the Designated CIH and the IHT shall be on the job site at all times when abatement activities are being performed. **AM # 0001 All exposure assessment and air monitoring reports shall be signed by the designated CIH.** The formal reporting relationship between the Designated CIH and IHTs, the Designated Competent Person, and the Contractor shall be indicated.
- d. Asbestos Abatement Workers: Asbestos abatement workers shall meet the requirements contained in 29 CFR 1926, Section .1101, 40 CFR 61, Subpart M, and other applicable federal, state and local requirements. Worker training documentation shall be provided as required on the "Certificate of Workers Acknowledgment" in this paragraph.
- e. Worker Training and Certification of Worker Acknowledgment: Training documentation will be required for each employee who will perform OSHA Class I, Class II, Class III, or Class IV asbestos abatement operations. Such documentation shall be submitted on a Contractor generated form titled "Certificate of Workers Acknowledgment", to be completed for each employee in the same format and containing the same information as the example certificate at the end of this section. Training course completion certificates (initial and most recent update refresher) required by the information checked on the form shall be attached.
- f. Physician: The Contractor shall provide the name, medical qualifications, address, telephone number and resume of the physician who will or has performed the medical examinations and evaluations of the persons who will conduct the asbestos abatement work tasks. The physician shall be currently licensed by the state where the workers will be or have been examined, have expertise in pneumoconiosis and shall be responsible for the determination of medical surveillance protocols and for review of examination/test results performed in compliance with 29 CFR 1926, Section .1101 and paragraph MEDICAL REQUIREMENTS. The physician shall be familiar with the site's hazards and the scope of this project.
- g. First Aid and CPR Trained Persons: The names of at least 2 persons who are currently trained in first aid and CPR by the American Red Cross or other approved agency shall be designated and shall be onsite at all times during site operations. They shall be trained in universal precautions and the use of PPE as described in the Bloodborne Pathogens Standard of 29 CFR 1910, Section .1030

and shall be included in the Contractor's Bloodborne Pathogen Program. These persons may perform other duties but shall be immediately available to render first aid when needed. A copy of each designated person's current valid First Aid and CPR certificate shall be provided.

- h. Independent AM # 0001 Third Party Testing Laboratory and Exposure Assessment and Air Monitoring Firm: The Contractor shall provide the name, address and telephone number of the independent testing laboratory AM #0001 and the exposure assessment and air monitoring firm selected to perform the sample analyses, AM #0001 exposure assessment and air monitoring, and report the results. The testing laboratory AM #0001 and the exposure assessment and air monitoring firm shall be completely independent from the Contractor as recognized by federal, state or local regulations. Written verification of the following criteria, signed by the testing laboratory principal and the Contractor, shall be submitted:
- (1) Phase contrast microscopy (PCM): The laboratory is fully equipped and proficient in conducting PCM of airborne samples using the methods specified by 29 CFR 1926, Section .1101, OSHA method ID-160, the most current version of NIOSH Pub No. 84-100 Method 7400, and NIOSH Pub No. 84-100 Method 7402, transmission electron microscopy (TEM); the laboratory is currently judged proficient (classified as acceptable) in counting airborne asbestos samples by PCM by successful participation in each of the last 4 rounds in the American Industrial Hygiene Association (AIHA) Proficiency Analytical Testing (PAT) Program; the names of the selected microscopists who will analyze airborne samples by PCM with verified documentation of their proficiency to conduct PCM analyses by being judged proficient in counting samples as current participating analysts in the AIHA PAT Program, and having successfully completed the Asbestos Sampling and Analysis course (NIOSH 582 or equivalent) with a copy of course completion certificate provided; when the PCM analysis is to be conducted onsite, documentation shall be provided certifying that the onsite analyst meets the same requirements.
 - (2) Polarized light microscopy (PLM): The laboratory is fully equipped and proficient in conducting PLM analyses of suspect ACM bulk samples in accordance with 40 CFR 763, Subpart E, Appendix E; the laboratory is currently accredited by NIST under the NVLAP for bulk asbestos analysis and will use analysts (names shall be provided) with demonstrated proficiency to conduct PLM to include its application to the identification and quantification of asbestos content.
 - (3) Transmission electron microscopy (TEM): The laboratory is [fully equipped and proficient in conducting TEM analysis of airborne samples using the mandatory method specified by 40 CFR 763, Subpart E, Appendix E; the laboratory is currently accredited by NIST under the NVLAP for airborne sample analysis of asbestos by TEM; the laboratory will use analysts (names shall be provided) that are currently evaluated as competent with demonstrated proficiency under the NIST NVLAP for airborne sample analysis of asbestos by TEM.] [proficient in conducting analysis for low asbestos concentration, enhanced analysis of floor tiles and bulk materials where multiple layers are present, using an improved EPA test method titled, "Method for the Determination of Asbestos in Bulk Building Materials".]
 - (4) PCM/TEM: The laboratory is fully equipped and each analyst (name shall be provided) possesses demonstrated proficiency in conducting PCM and TEM analysis of airborne samples using NIOSH Pub No. 84-100 Method 7400 PCM and NIOSH Pub No. 84-100 Method 7402 (TEM confirmation of asbestos content of PCM results) from the same filter.
- i. Disposal Facility, Transporter: The Contractor shall provide written evidence that the landfill to be used is approved for asbestos disposal by the [USEPA] [and] [state] [and] [local] regulatory agencies. Copies of signed agreements between the Contractor (including subcontractors and transporters) and the asbestos waste disposal facility to accept and dispose of all asbestos containing waste generated during the performance of this contract shall be provided. Qualifications shall be provided for each subcontractor or transporter to be used, indicating previous experience in transport and disposal of asbestos waste to include all required state and local waste hauler requirements for asbestos. The Contractor and transporters shall meet the DOT requirements of 49 CFR 171, 49 CFR 172, and 49 CFR 173 as well as registration requirements of 49 CFR 107 and other applicable state or local requirements. The disposal facility shall meet the requirements of 40 CFR 61, Sections .154 or .155, as required in 40 CFR 61, Section .150(b), and other applicable state or local requirements.

1.5.3 Federal, State or Local Citations on Previous Projects

The Contractor and all subcontractors shall submit a statement, signed by an officer of the company, containing a record of any citations issued by Federal, State or local regulatory agencies relating to asbestos activities (including projects, dates, and resolutions); a list of penalties incurred through non-compliance with asbestos project specifications, including liquidated damages, overruns in scheduled time limitations and resolutions; and situations in which an asbestos-related contract has been terminated (including projects, dates, and reasons for terminations). If there are none, a negative declaration signed by an officer of the company shall be provided.

1.6 REGULATORY REQUIREMENTS

In addition to detailed requirements of this specification, work performed under this contract shall comply with EM 385-1-1, applicable federal, state, and local laws, ordinances, criteria, rules and regulations regarding handling, storing, transporting, and disposing of asbestos waste materials. This includes, but is not limited to, OSHA standards, 29 CFR 1926, especially Section .1101, 40 CFR 61, Subpart M and 40 CFR 763. Matters of interpretation of standards shall be submitted to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall apply. The following state and local laws, rules and regulations regarding demolition, removal, encapsulation, construction alteration, repair, maintenance, renovation, spill/emergency cleanup, housekeeping, handling, storing, transporting and disposing of asbestos material apply: [_____].

1.7 SAFETY AND HEALTH PROGRAM AND PLANS

The Contractor shall develop and submit a written comprehensive site-specific Accident Prevention Plan at least [30] [_____] days prior to the preconstruction conference. The Accident Prevention Plan shall address requirements of EM 385-1-1, Appendix A, covering onsite work to be performed by the Contractor and subcontractors. The Accident Prevention Plan shall incorporate an Asbestos Hazard Abatement Plan, and Activity Hazard Analyses as separate appendices into 1 site specific Accident Prevention Plan document. Any portions of the Contractor's overall Safety and Health Program that are referenced in the Accident Prevention Plan, e.g., respirator program, hazard communication program, confined space entry program, etc., shall be included as appendices to the Accident Prevention Plan. The plan shall take into consideration all the individual asbestos abatement work tasks identified in Table 1. The plan shall be prepared, signed (and sealed, including certification number if required), and dated by the Contractor's Designated IH, Competent Person, and Project Supervisor.

1.7.1 Asbestos Hazard Abatement Plan Appendix

The Asbestos Hazard Abatement Plan appendix to the Accident Prevention Plan shall include, but not be limited to, the following:

- a. The personal protective equipment to be used;
- b. The location and description of regulated areas including clean and dirty areas, access tunnels, and decontamination unit (clean room, shower room, equipment room, storage areas such as load-out unit);
- c. Initial exposure assessment in accordance with 29 CFR 1926, Section .1101;
- d. Level of supervision;
- e. Method of notification of other employers at the worksite;
- f. Abatement method to include containment and control procedures;
- g. Interface of trades involved in the construction;
- h. Sequencing of asbestos related work;
- i. Storage and disposal procedures and plan;
- j. Type of wetting agent and asbestos encapsulant to be used;
- k. Location of local exhaust equipment;
- l. Air monitoring methods (personal, environmental and clearance);
- m. Bulk sampling and analytical methods (if required);
- n. A detailed description of the method to be employed in order to control the spread of ACM wastes and airborne fiber concentrations;

- o. Fire and medical emergency response procedures;
- p. The security procedures to be used for all regulated areas.

1.7.2 Activity Hazard Analyses Appendix

Activity Hazard Analyses, for each major phase of work, shall be submitted and updated during the project. The Activity Hazard Analyses format shall be in accordance with EM 385-1-1 (Figure 1-1). The analysis shall define the activities to be performed for a major phase of work, identify the sequence of work, the specific hazards anticipated, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level. Work shall not proceed on that phase until the Activity Hazard Analyses has been accepted and a preparatory meeting has been conducted by the Contractor to discuss its contents with everyone engaged in the activities, including the onsite Government representatives. The Activity Hazard Analyses shall be continuously reviewed and, when appropriate, modified to address changing site conditions or operations.

1.8 PRECONSTRUCTION CONFERENCE AND ONSITE SAFETY

The Contractor and the Contractor's Designated Competent Person, Project Supervisor, and Designated IH shall meet with the Contracting Officer prior to beginning work at a safety preconstruction conference to discuss the details of the Contractor's submitted Accident Prevention Plan to include the Asbestos Hazard Abatement Plan and Activity Hazard Analyses appendices. Deficiencies in the Accident Prevention Plan will be discussed and the Accident Prevention Plan shall be revised to correct the deficiencies and resubmitted for acceptance. Any changes required in the specification as a result of the Accident Prevention Plan shall be identified specifically in the plan to allow for free discussion and acceptance by the Contracting Officer, prior to the start of work. Onsite work shall not begin until the Accident Prevention Plan has been accepted. A copy of the written Accident Prevention Plan shall be maintained onsite. Changes and modifications to the accepted Accident Prevention Plan shall be made with the knowledge and concurrence of the Designated IH, the Project Supervisor, Designated Competent Person, and the Contracting Officer. Should any unforeseen hazard become evident during the performance of the work, the Designated IH shall bring such hazard to the attention of the Project Supervisor, Designated Competent Person, and the Contracting Officer, both verbally and in writing, for resolution as soon as possible. In the interim, all necessary action shall be taken by the Contractor to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public, and the environment. Once accepted by the Contracting Officer, the Accident Prevention Plan, including the Asbestos Hazard Abatement Plan and Activity Hazard Analyses will be enforced as if an addition to the contract. Disregarding the provisions of this contract or the accepted Accident Prevention Plan will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified. [_____].

1.9 SECURITY

[Twenty-four hour security guard] [Fenced and locked security area] [_____] shall be provided for each regulated area. A log book shall be kept documenting entry into and out of the regulated area. Entry into regulated areas shall only be by personnel authorized by the Contractor and the Contracting Officer. Personnel authorized to enter regulated areas shall be trained, be medically evaluated, and wear the required personal protective equipment for the specific regulated area to be entered.

1.10 MEDICAL REQUIREMENTS

Medical requirements shall conform to 29 CFR 1926, Section .1101.

1.10.1 Medical Examinations

Before being exposed to airborne asbestos fibers, workers shall be provided with a medical examination as required by 29 CFR 1926, Section .1101 and other pertinent state or local requirements. This requirement shall have been satisfied within the last 12 months. The same medical examination shall be given on an annual basis to employees engaged in an occupation involving asbestos and within 30 calendar days before or after the termination of employment in such occupation. X-ray films of asbestos workers shall be identified to the consulting radiologist and medical record jackets shall be marked with the word "asbestos."

1.10.1.1 Information Provided to the Physician

The Contractor shall provide the following information in writing to the examining physician:

- a. A copy of 29 CFR 1926, Section .1101 and Appendices D, E, G, and I;
- b. A description of the affected employee's duties as they relate to the employee's

exposure;

- c. The employee's representative exposure level or anticipated exposure level;
- d. A description of any personal protective and respiratory equipment used or to be used;
- e. Information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

1.10.1.2 Written Medical Opinion

For each worker, a written medical opinion prepared and signed by a licensed physician indicating the following:

- a. Summary of the results of the examination.
- b. The potential for an existing physiological condition that would place the employee at an increased risk of health impairment from exposure to asbestos.
- c. The ability of the individual to wear personal protective equipment, including respirators, while performing strenuous work tasks under cold and/or heat stress conditions.
- d. A statement that the employee has been informed of the results of the examination, provided with a copy of the results, informed of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure, and informed of any medical condition that may result from asbestos exposure.

1.10.2 Medical and Exposure Records

Complete and accurate records shall be maintained of each employee's medical examinations, medical records, and exposure data, as required by 29 CFR 1910, Section .1910.20 and 29 CFR 1926, Section .1101 for a period of [50] [_____] years after termination of employment. Records of the required medical examinations and exposure data shall be made available, for inspection and copying, to the Assistant Secretary of Labor for Occupational Safety and Health (OSHA) or authorized representatives of the employee and an employee's physician upon request of the employee or former employee. A copy of the required medical certification for each employee shall be maintained on file at the worksite for review, as requested by the Contracting Officer or the representatives.

1.11 TRAINING PROGRAM

1.11.1 General Training Requirements

The Contractor shall establish a training program as specified by EPA Model Accreditation Plan (MAP), training requirements at 40 CFR 763, Subpart E, Appendix C, the State of [_____] regulation no. [_____] , OSHA requirements at 29 CFR 1926, Section .1101(k)(9), and this specification. Contractor employees shall complete the required training for the type of work they are to perform and such training shall be documented and provided to the Contracting Officer as specified in paragraph QUALIFICATIONS.

1.11.2 Project Specific Training

Prior to commencement of work, each worker shall be instructed by the Contractor's Designated IH and Competent Person in the following project specific training:

- a. The hazards and health effects of the specific types of ACM to be abated;
- b. The content and requirements of the Contractor's Accident Prevention Plan to include the Asbestos Hazard Abatement Plan and Activity Hazard Analyses and site-specific safety and health precautions;
- c. Hazard Communication Program;
- d. Hands-on training for each asbestos abatement technique to be employed;
- e. Heat and/or cold stress monitoring specific to this project;
- f. Air monitoring program and procedures;
- g. Medical surveillance to include medical and exposure record-keeping procedures;
- h. The association of cigarette smoke and asbestos-related disease;
- i. Security procedures;

- j. Specific work practice controls and engineering controls required for each Class of work in accordance with 29 CFR 1926, Section .1101.

1.12 RESPIRATORY PROTECTION PROGRAM

The Contractor's Designated IH shall establish in writing, and implement a respiratory protection program in accordance with 29 CFR 1926, Section .1101, 29 CFR 1910, Section .134, ANSI Z88.2, CGA G-7, CGA G-7.1 and DETAIL SHEET 12. The Contractor's Designated IH shall establish minimum respiratory protection requirements based on measured or anticipated levels of airborne asbestos fiber concentrations encountered during the performance of the asbestos abatement work. The Contractor's respiratory protection program shall include, but not be limited to, the following elements:

- a. The company policy, used for the assignment of individual responsibility, accountability, and implementation of the respiratory protection program.
- b. The standard operating procedures covering the selection and use of respirators. Respiratory selection shall be determined by the hazard to which the worker is exposed.
- c. Medical evaluation of each user to verify that the worker may be assigned to an activity where respiratory protection is required.
- d. Training in the proper use and limitations of respirators.
- e. Respirator fit-testing, i.e., quantitative, qualitative and individual functional fit checks.
- f. Regular cleaning and disinfection of respirators.
- g. Routine inspection of respirators during cleaning and after each use when designated for emergency use.
- h. Storage of respirators in convenient, clean, and sanitary locations.
- i. Surveillance of regulated area conditions and degree of employee exposure (e.g., through air monitoring).
- j. Regular evaluation of the continued effectiveness of the respiratory protection program.
- k. Recognition and procedures for the resolution of special problems as they affect respirator use (e.g., no facial hair that comes between the respirator face piece and face or interferes with valve function; prescription eye wear usage; contact lenses usage; etc.).
- l. Proper training in putting on and removing respirators.

1.12.1 Respiratory Fit Testing

A qualitative or quantitative fit test conforming to 29 CFR 1926, Section 1101, Appendix C shall be conducted by the Contractor's Designated IH for each Contractor worker required to wear a respirator, and for the Contracting Officer and authorized visitors who enter a regulated area where respirators are required to be worn. A respirator fit test shall be performed for each worker wearing a negative-pressure respirator prior to initially wearing a respirator on this project and every 6 months thereafter. The qualitative fit tests may be used only for testing the fit of half-mask respirators where they are permitted to be worn, or of full-facepiece air purifying respirators where they are worn at levels at which half-facepiece air purifying respirators are permitted. If physical changes develop that will affect the fit, a new fit test for the worker shall be performed. Functional fit checks shall be performed by employees each time a respirator is put on and in accordance with the manufacturer's recommendation.

1.12.2 Respirator Selection and Use Requirements

The Contractor shall provide respirators, and ensure that they are used as required by 29 CFR 1926, Section .1101 and in accordance with the manufacturer's recommendations. Respirators shall be jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health (MSHA/NIOSH), or by NIOSH, under the provisions of 42 CFR 84, for use in environments containing airborne asbestos fibers. Personnel who handle ACM, enter regulated areas that require the wearing of a respirator, or who are otherwise carrying out abatement activities that require the wearing of a respirator, shall be provided with approved respirators that are fully protective of the worker at the measured or anticipated airborne asbestos concentration level to be encountered. For air-purifying respirators, the particulate filter portion of the cartridges or canister approved for use in airborne asbestos environments shall

be high-efficiency particulate air (HEPA). The initial respirator selection and the decisions regarding the upgrading or downgrading of respirator type shall be made by the Contractor's Designated IH based on the measured or anticipated airborne asbestos fiber concentrations to be encountered. Recommendations made by the Contractor's Designated IH to downgrade respirator type shall be submitted in writing to the Contracting Officer. The Contractor's Designated Competent Person in consultation with the Designated IH, shall have the authority to take immediate action to upgrade or downgrade respiratory type when there is an immediate danger to the health and safety of the wearer. Respirators shall be used in the following circumstances:

- a. During all Class I asbestos jobs.
- b. During all Class II work where the ACM is not removed in a substantially intact state.
- c. During all Class II and III work which is not performed using wet methods. Respirators need not be worn during removal of ACM from sloped roofs when a negative exposure assessment has been made and ACM is removed in an intact state.
- d. During all Class II and III asbestos jobs where the Contractor does not produce a negative exposure assessment.
- e. During all Class III jobs where TSI or surfacing ACM is being disturbed.
- f. During all Class IV work performed within regulated areas where employees performing other work are required to wear respirators.
- g. During all work where employees are exposed above the PEL-TWA or PEL-Excursion Limit.
- h. In emergencies

1.12.3 Class I Work

The Contractor shall provide: (1) a tight-fitting, powered air purifying respirator equipped with high efficiency filters, or (2) a full-facepiece supplied air respirator operated in the pressure demand mode, equipped with HEPA egress cartridges, or (3) an auxiliary positive pressure self-contained breathing apparatus, for all employees within the regulated area where Class I work is being performed; provided that a negative exposure assessment has not been produced, and that the exposure level will not exceed 1 f/cc as an 8-hour time weighted average. A full-facepiece supplied air respirator, operated in the pressure demand mode, equipped with an auxiliary positive pressure self-contained breathing apparatus shall be provided under such conditions, if the exposure assessment indicates exposure levels above 1 f/cc as an 8-hour time weighted average.

1.12.4 Class II and III Work

The Contractor shall provide an air purifying respirator, other than a disposable respirator, equipped with high-efficiency filters whenever the employee performs Class II and III asbestos jobs where the Contractor does not produce a negative exposure assessment ; and Class III jobs where TSI or surfacing ACM is being disturbed.

1.12.5 Sanitation

Employees who wear respirators shall be permitted to leave work areas to wash their faces and respirator facepieces whenever necessary to prevent skin irritation associated with respirator use.

1.13 HAZARD COMMUNICATION PROGRAM

A hazard communication program shall be established and implemented in accordance with 29 CFR 1926, Section .59. Material safety data sheets (MSDSs) shall be provided for all hazardous materials brought onto the worksite. One copy shall be provided to the Contracting Officer and 1 copy shall be included in the Contractor's Hazard Communication Program.

1.14 LICENSES, PERMITS AND NOTIFICATIONS

1.14.1 General Legal Requirements

Necessary licenses, permits and notifications shall be obtained in conjunction with the project's asbestos abatement, transportation and disposal actions and timely notification furnished of such actions as required by federal, state, regional, and local authorities. The Contractor shall the Regional Office of the USEPA (if required) and the state's environmental protection agency responsible for asbestos air emissions, local air pollution control district/agency, and state OSHA program, and the Contracting

Officer Representative in writing, at least 10 working days prior to the commencement of work, in accordance with 40 CFR 61, Subpart M, and state and local requirements to include the mandatory "Notification of Demolition and Renovation Record" form and other required notification documents. Notification shall be by Certified Mail, Return Receipt Requested. Notification to state or other regulatory agency shall be signed by an authorized person of the installation or responsible party. The Contractor shall schedule signing of notification to meet the notification requirement stipulated by the regulatory agency. The Contractor shall furnish copies of the receipts to the Contracting Officer, in writing, prior to the commencement of work. Local fire department shall be notified 3 days before fire-proofing material is removed from a building and the notice shall specify whether or not the material contains asbestos. A copy of the rental company's written acknowledgment and agreement shall be provided as required by paragraph RENTAL EQUIPMENT. For licenses, permits, and notifications that the Contractor is responsible for obtaining, the Contractor shall pay any associated fees or other costs incurred.

1.14.2 Litigation and Notification

The Contractor shall notify the Contracting Officer if any of the following occur:

- a. The Contractor or any of the subcontractors are served with notice of violation of any law, regulation, permit or license which relates to this contract;
- b. Proceedings are commenced which could lead to revocation of related permits or licenses; permits, licenses or other Government authorizations relating to this contract are revoked;
- c. Litigation is commenced which would affect this contract;
- d. The Contractor or any of the subcontractors become aware that their equipment or facilities are not in compliance or may fail to comply in the future with applicable laws or regulations.

1.15 PERSONAL PROTECTIVE EQUIPMENT

[Three] [_____] complete sets of personal protective equipment shall be made available to the Contracting Officer and authorized visitors for entry to the regulated area. Contracting Officer and authorized visitors shall be provided with training equivalent to that provided to Contractor employees in the selection, fitting, and use of the required personal protective equipment and the site safety and health requirements. Contractor workers shall be provided with personal protective clothing and equipment and the Contractor shall ensure that it is worn properly. The Contractor's Designated IH and Designated Competent Person shall select and approve all the required personal protective clothing and equipment to be used.

1.15.1 Respirators

Respirators shall be in accordance with paragraph RESPIRATORY PROTECTION PROGRAM.

1.15.2 Whole Body Protection

Personnel exposed to airborne concentrations of asbestos that exceed the PELs, or for all OSHA Classes of work for which a required negative exposure assessment is not produced, shall be provided with whole body protection and such protection shall be worn properly. The Contractor's Designated IH and Competent Person shall select and approve the whole body protection to be used. The Competent Person shall examine work suits worn by employees at least once per work shift for rips or tears that may occur during performance of work. When rips or tears are detected while an employee is working, rips and tears shall be immediately mended, or the work suit shall be immediately replaced. Disposable whole body protection shall be disposed of as asbestos contaminated waste upon exiting from the regulated area. Reusable whole body protection worn shall be either disposed of as asbestos contaminated waste upon exiting from the regulated area or be properly laundered in accordance with 29 CFR 1926, Section .1101. Whole body protection used for asbestos abatement shall not be removed from the worksite by a worker to be cleaned. Recommendations made by the Contractor's Designated IH to downgrade whole body protection shall be submitted in writing to the Contracting Officer. The Contractor's Designated Competent Person, in consultation with the Designated IH, has the authority to take immediate action to upgrade or downgrade whole body protection when there is an immediate danger to the health and safety of the wearer.

1.15.2.1 Coveralls

[Disposable-impermeable] [Disposable-breathable] [Reusable] coveralls with a zipper front shall be provided. Sleeves shall be secured at the wrists, and foot coverings secured at the ankles. See DETAIL SHEET 13.

1.15.2.2 Underwear

Disposable underwear shall be provided. If reusable underwear are used, they shall be disposed of as asbestos contaminated waste or laundered in accordance with 29 CFR 1926, Section .1101. Asbestos abatement workers shall not remove contaminated reusable underwear worn during abatement of ACM from the site to be laundered.

1.15.2.3 Work Clothing

An additional coverall shall be provided when the abatement and control method employed does not provide for the exit from the regulated area directly into an attached decontamination unit. Cloth work clothes for wear under the protective coverall, and foot coverings, shall be provided when work is being conducted in low temperature conditions. Cloth work clothes shall be either disposed of as asbestos contaminated waste or properly laundered in accordance with 29 CFR 1926, Section .1101.

1.15.2.4 Gloves

Gloves shall be provided to protect the hands. Where there is the potential for hand injuries (i.e., scrapes, punctures, cuts, etc.) a suitable glove shall be provided and used.

1.15.2.5 Foot Coverings

Cloth socks shall be provided and worn next to the skin. Footwear, as required by OSHA and EM 385-1-1, that is appropriate for safety and health hazards in the area shall be worn. Rubber boots shall be used in moist or wet areas. Reusable footwear removed from the regulated area shall be thoroughly decontaminated or disposed of as ACM waste. Disposable protective foot covering shall be disposed of as ACM waste. If rubber boots are not used, disposable foot covering shall be provided.

1.15.2.6 Head Covering

Hood type [disposable] [reusable] head covering shall be provided. In addition, protective head gear (hard hats) shall be provided as required. Hard hats shall only be removed from the regulated area after being thoroughly decontaminated.

1.15.2.7 Protective Eye Wear

Eye protection provided shall be in accordance with ANSI Z87.1.

1.16 HYGIENE FACILITIES AND PRACTICES

The Contractor shall establish a decontamination area for the decontamination of employees, material and equipment. The Contractor shall ensure that employees enter and exit the regulated area through the decontamination area.

1.16.1 Shower Facilities

Shower facilities, when provided, shall comply with 29 CFR 1910, Section .141(d)(3).

1.16.2 3-Stage Decontamination Area

[A temporary negative pressure decontamination unit that is adjacent and attached in a leak-tight manner to the regulated area shall be provided as described in SET-UP DETAIL SHEET Numbers 22 and 23.] [Utilization of prefabricated units shall have prior approval of the Contracting Officer.] The decontamination unit shall have an equipment room and a clean room separated by a shower that complies with 29 CFR 1910, Section .141 (unless the Contractor can demonstrate that such facilities are not feasible). Equipment and surfaces of containers filled with ACM shall be cleaned prior to removing them from the equipment room or area. Surfaces of the equipment room shall be wet wiped 2 times after each shift. Materials used for wet wiping shall be disposed of as asbestos contaminated waste. Two separate lockers shall be provided for each asbestos worker, one in the equipment room and one in the clean room. [Hot water service may be secured from the building hot water system provided backflow protection is installed by the Contractor at the point of connection.] [Should sufficient hot water be unavailable, the Contractor shall provide a minimum 40 gal. electric water heater with minimum recovery rate of 20 gal. per hour and a temperature controller for each showerhead.] The Contractor shall provide a minimum of [2] [_____] showers. Instantaneous type in-line water heater may be incorporated at each shower head in lieu of hot water heater, upon approval by the Contracting Officer. Flow and temperature controls shall be located within the shower and shall be adjustable by the user. The wastewater pump shall be sized for 1.25 times the showerhead flow-rate at a pressure head sufficient to satisfy the filter head loss and discharge line losses. The pump shall supply a minimum 25 gpm flow with 35 ft. of pressure head. Used shower water shall be collected and filtered to remove asbestos contamination. Filters and residue shall be disposed of as asbestos contaminated material, per DETAIL SHEETS 9 and 14. Filtered water shall be discharged to the sanitary system. Wastewater filters shall be installed in series with the first stage pore size

of 20 microns and the second stage pore size of 5 microns. The floor of the decontamination unit's clean room shall be kept dry and clean at all times. Water from the shower shall not be allowed to wet the floor in the clean room. Surfaces of the clean room and shower shall be wet-wiped 2 times after each shift change with a disinfectant solution. Proper housekeeping and hygiene requirements shall be maintained. Soap and towels shall be provided for showering, washing and drying. Any cloth towels provided shall be disposed of as ACM waste or shall be laundered in accordance with 29 CFR 1926, Section .1101.

1.16.3 Load-Out Unit

A temporary load-out unit that is adjacent and connected to the regulated area and [access tunnel] shall be provided as described in DETAIL SHEET Number [20] [and] [25]. Utilization of prefabricated units shall have prior approval of the Contracting Officer. The load-out unit shall be attached in a leak-tight manner to each regulated area. Surfaces of the load-out unit and access tunnel shall be adequately wet-wiped 2 times after each shift change. Materials used for wet wiping shall be disposed of as asbestos contaminated waste.

1.16.4 Single Stage Decontamination Area

A decontamination area (equipment room/area) shall be provided for Class I work involving less than 25 feet or 10 square feet of TSI or surfacing ACM, and for Class II and Class III asbestos work operations where exposures exceed the PELs or where there is no negative exposure assessment produced before the operation. The equipment room or area shall be adjacent to the regulated area for the decontamination of employees, material, and their equipment which is contaminated with asbestos. The equipment room or area shall consist of an area covered by an impermeable drop cloth on the floor or horizontal working surface. The area must be of sufficient size to accommodate cleaning of equipment and removing personal protective equipment without spreading contamination beyond the area. Surfaces of the equipment room shall be wet wiped 2 times after each shift. Materials used for wet wiping shall be disposed of as asbestos contaminated waste.

1.16.5 Decontamination Requirements for Class IV Work

The Contractor shall ensure that employees performing Class IV work within a regulated area comply with the hygiene practice required of employees performing work which has a higher classification within that regulated area, or the Contractor shall provide alternate decontamination area facilities for employees cleaning up debris and material which is TSI or surfacing ACM.

1.16.6 Decontamination Area Entry Procedures

The Contractor shall ensure that employees entering the decontamination area through the clean room or clean area:

- a. Remove street clothing in the clean room or clean area and deposit it in lockers.
- b. Put on protective clothing and respiratory protection before leaving the clean room or clean area.
- c. Pass through the equipment room to enter the regulated area.

1.16.7 Decontamination Area Exit Procedures

The Contractor shall ensure that the following procedures are followed:

- a. Before leaving the regulated area, respirators shall be worn while employees remove all gross contamination and debris from their work clothing using a HEPA vacuum.
- b. Employees shall remove their protective clothing in the equipment room and deposit the clothing in labeled impermeable bags or containers (see Detail Sheets 9 and 14) for disposal and/or laundering.
- c. Employees shall not remove their respirators in the equipment room.
- d. Employees shall shower prior to entering the clean room. If a shower has not been located between the equipment room and the clean room or the work is performed outdoors, the Contractor shall ensure that employees engaged in Class I asbestos jobs: a) Remove asbestos contamination from their work suits in the equipment room or decontamination area using a HEPA vacuum before proceeding to a shower that is not adjacent to the work area; or b) Remove their contaminated work suits in the equipment room, without cleaning worksuits, and proceed to a shower that is not adjacent to the work area.

- e. After showering, employees shall enter the clean room before changing into street clothes.

1.16.8 Lunch Areas

The Contractor shall provide lunch areas in which the airborne concentrations of asbestos are below 0.01 f/cc.

1.16.9 Smoking

Smoking, if allowed by the Contractor, shall only be permitted in designated areas approved by the Contracting Officer.

1.17 REGULATED AREAS

All Class I, II, and III asbestos work shall be conducted within regulated areas. The regulated area shall be demarcated to minimize the number of persons within the area and to protect persons outside the area from exposure to airborne asbestos. Where critical barriers or negative pressure enclosures are used, they shall demarcate the regulated area. Access to regulated areas shall be limited to authorized persons. The Contractor shall control access to regulated areas, ensure that only authorized personnel enter, and verify that Contractor required medical surveillance, training and respiratory protection program requirements are met prior to allowing entrance.

1.18 WARNING SIGNS AND TAPE

Warning signs and tape printed [bilingually] [in English] [and] [_____] [in pictographs and graphics] shall be provided at the regulated boundaries and entrances to regulated areas. The Contractor shall ensure that all personnel working in areas contiguous to regulated areas comprehend the warning signs. Signs shall be located to allow personnel to read the signs and take the necessary protective steps required before entering the area. Warning signs, as shown and described in DETAIL SHEET 11, shall be in vertical format conforming to 29 CFR 1910 and 29 CFR 1926, Section .1101, a minimum of 20 by 14 inches, and displaying the following legend in the lower panel:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
[RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA]

Spacing between lines shall be at least equal to the height of the upper of any two lines. Warning tape shall be provided as shown and described on DETAIL SHEET 11. Decontamination unit signage shall be as shown and described on DETAIL SHEET 15.

1.19 WARNING LABELS

Warning labels shall be affixed to all asbestos disposal containers used to contain asbestos materials, scrap, waste debris, and other products contaminated with asbestos. Containers with preprinted warning labels conforming to requirements are acceptable. Warning labels shall be as described in DETAIL SHEET 14, shall conform to 29 CFR 1926, Section .1101 and shall be of sufficient size to be clearly legible displaying the following legend:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

1.20 LOCAL EXHAUST VENTILATION

Local exhaust ventilation units shall conform to ANSI Z9.2 and 29 CFR 1926, Section .1101. Filters on local exhaust system equipment shall conform to ANSI Z9.2 and UL 586. Filter shall be UL labeled.

1.21 TOOLS

Vacuums shall be leak proof to the filter, equipped with HEPA filters, of sufficient capacity and necessary capture velocity at the nozzle or nozzle attachment to efficiently collect, transport and retain the ACM waste material. Power tools shall not be used to remove ACM unless the tool is equipped with effective, integral HEPA filtered exhaust ventilation capture and collection system, or has otherwise been approved for use by the Contracting Officer. Residual asbestos shall be removed from reusable tools prior to storage and reuse. Reusable tools shall be thoroughly decontaminated prior to being removed from regulated areas.

1.22 RENTAL EQUIPMENT

If rental equipment is to be used, written notification shall be provided to the rental agency, concerning the intended use of the equipment, the possibility of asbestos contamination of the equipment and the steps that will be taken to decontaminate such equipment. A written acceptance of the terms of the Contractor's notification shall be obtained from the rental agency.

1.23 AIR MONITORING EQUIPMENT

The Contractor's Designated IH shall approve air monitoring equipment to be used to collect samples. The equipment shall include, but shall not be limited to:

- a. High-volume sampling pumps that can be calibrated and operated at a constant airflow up to 16 liters per minute when equipped with a sampling train of tubing and filter cassette.
- b. Low-volume, battery powered, body-attachable, portable personal pumps that can be calibrated to a constant airflow up to approximately 3.5 liters per minute when equipped with a sampling train of tubing and filter cassette, and a self-contained rechargeable power pack capable of sustaining the calibrated flow rate for a minimum of 10 hours. The pumps shall also be equipped with an automatic flow control unit which shall maintain a constant flow, even as filter resistance increases due to accumulation of fiber and debris on the filter surface.
- c. Single use standard 25 mm diameter cassette, open face, 0.8 micron pore size, mixed cellulose ester membrane filters and cassettes with 50 mm electrically conductive extension cowl, and shrink bands, to be used with low flow pumps in accordance with 29 CFR 1926, Section .1101 for personal air sampling.
- d. Single use standard 25 mm diameter cassette, open face, 0.45 micron pore size, mixed cellulose ester membrane filters and cassettes with 50 mm electrically conductive cowl, and shrink bands, to be used with high flow pumps when conducting environmental area sampling using NIOSH Pub No. 84-100 Methods 7400 and 7402, (and the transmission electric microscopy method specified at 40 CFR 763 if required).
- e. Appropriate plastic tubing to connect the air sampling pump to the selected filter cassette.
- f. A flow calibrator capable of calibration to within plus or minus 2 percent of reading over a temperature range of minus 4 to plus 140 degrees F and traceable to a NIST primary standard.

1.24 EXPENDABLE SUPPLIES

1.24.1 Glovebag

Glovebags shall be provided as described in 29 CFR 1926, Section .1101 and SET-UP DETAIL SHEET 10. The glovebag assembly shall be 6 mil thick plastic, prefabricated and seamless at the bottom with preprinted OSHA warning label.

1.24.2 Duct Tape

Industrial grade duct tape of appropriate widths suitable for bonding sheet plastic and disposal container shall be provided.

1.24.3 Disposal Containers

Leak-tight (defined as solids, liquids, or dust that cannot escape or spill out) disposal containers shall be provided for ACM wastes as required by 29 CFR 1926 Section .1101 and DETAIL SHEETS 9A, 9B, 9C and 14.

1.24.4 Disposal Bags

Leak-tight bags, 6 mil thick, shall be provided for placement of asbestos generated waste as described in DETAIL SHEET 9A.

1.24.5 Fiberboard Drums

Fiberboard drums shall be [_____].

1.24.6 Cardboard Boxes

Heavy-duty corrugated cardboard boxes, coated with plastic or wax to retard deterioration from moisture, shall be provided as described in DETAIL SHEET 9C, if required by state and local requirements. Boxes shall fit into selected ACM disposal

bags. Filled boxes shall be sealed leak-tight with duct tape.

1.24.7 Sheet Plastic

Sheet plastic shall be polyethylene of 6 mil minimum thickness and shall be provided in the largest sheet size necessary to minimize seams, as indicated on the project drawings. Film shall be [clear] [frosted] [or] [black] and conform to ASTM D 4397, except as specified below:

1.24.7.1 Flame Resistant

Where a potential for fire exists, flame-resistant sheets shall be provided. Film shall be [frosted] [or] [black] and shall conform to the requirements of NFPA 701.

1.24.7.2 Reinforced

Reinforced sheets shall be provided where high skin strength is required, such as where it constitutes the only barrier between the regulated area and the outdoor environment. The sheet stock shall consist of translucent, nylon-reinforced or woven-polyethylene thread laminated between 2 layers of polyethylene film. Film shall meet flame resistant standards of NFPA 701.

1.24.8 Amended Water

Amended water shall meet the requirements of ASTM D 1331.

1.24.9 Mastic Removing Solvent

Mastic removing solvent shall be nonflammable and shall not contain methylene chloride, glycol ether, or halogenated hydrocarbons. Solvents used onsite shall have a flash point greater than 140 degrees F.

1.24.10 Leak-tight Wrapping

Two layers of 6 mil minimum thick polyethylene sheet stock shall be used for the containment of removed asbestos-containing components or materials such as reactor vessels, large tanks, boilers, insulated pipe segments and other materials too large to be placed in disposal bags as described in DETAIL SHEET 9B. Upon placement of the ACM component or material, each layer shall be individually leak-tight sealed with duct tape.

1.24.11 Viewing Inspection Window

Where feasible, a minimum of 1 clear, 1/8 inch thick, acrylic sheet, 18 by 24 inches, shall be installed as a viewing inspection window at eye level on a wall in each containment enclosure. The windows shall be sealed leak-tight with industrial grade duct tape.

1.24.12 Wetting Agents

Removal encapsulant (a penetrating encapsulant) shall be provided when conducting removal abatement activities that require a longer removal time or are subject to rapid evaporation of amended water. The removal encapsulant shall be capable of wetting the ACM and retarding fiber release during disturbance of the ACM greater than or equal to that provided by amended water. Performance requirements for penetrating encapsulants are specified in paragraph ENCAPSULANTS.

1.24.13 Strippable Coating

Strippable coating in aerosol cans shall be used to adhere to surfaces and to be removed cleanly by stripping, at the completion of work. This work shall only be done in well ventilated areas.

1.25 MISCELLANEOUS ITEMS

A sufficient quantity of other items, such as, but not limited to: scrapers, brushes, brooms, staple guns, tarpaulins, shovels, rubber squeegees, dust pans, other tools, scaffolding, staging, enclosed chutes, wooden ladders, lumber necessary for the construction of containments, UL approved temporary electrical equipment, material and cords, ground fault circuit interrupters, water hoses of sufficient length, fire extinguishers, first aid kits, portable toilets, logbooks, log forms, markers with indelible ink, spray paint in bright color to mark areas, project boundary fencing, etc., shall be provided.

PART 2 PRODUCTS

2.1 ENCAPSULANTS

Encapsulants shall conform to USEPA requirements, shall contain no toxic or hazardous substances and no solvent and shall meet the following requirements:

ALL ENCAPSULANTS

Requirement	Test Standard
Flame Spread - 25, Smoke Emission - 50	ASTM E 84
Combustion Toxicity Zero Mortality	Univ. of Pittsburgh Protocol
Life Expectancy, 20 yrs Accelerated Aging Test	ASTM C 732
Permeability, Minimum 0.4 perms	ASTM E 96

Additional Requirements for Bridging Encapsulant

Requirement	Test Standard
Cohesion/Adhesion Test, 50 pounds of force/foot	ASTM E 736
Fire Resistance, Negligible affect on fire resistance rating over 3 hour test (Classified by UL for use over fibrous and cementitious sprayed fireproofing)	ASTM E 119
Impact Resistance, Minimum 43 in-lb (Gardner Impact Test)	ASTM D 2794
Flexibility, no rupture or cracking (Mandrel Bend Test)	ASTM D 522

Additional Requirements for Penetrating Encapsulant

Requirement	Test Standard
Cohesion/Adhesion Test, 50 pounds of force/foot	ASTM E 736
Fire Resistance, Negligible affect on fire resistance rating over 3 hour test(Classified by UL for use over fibrous and cementitious sprayed fireproofing)	ASTM E 119
Impact Resistance, Minimum 43 in-lb (Gardner Impact Test)	ASTM D 2794
Flexibility, no rupture or cracking (Mandrel Bend Test)	ASTM D 522

Additional Requirements for Lockdown Encapsulant

Requirement	Test Standard
Fire Resistance, Negligible affect on fire resistance rating over 3 hour test(Tested with fireproofing over encapsulant applied directly to steel member)	ASTM E 119
Bond Strength, 100 pounds of force/foot (Tests compatibility with cementitious and fibrous fireproofing)	ASTM E 736

2.2 ENCASEMENT PRODUCTS

Encasement shall consist of primary cellular polymer coat, polymer finish coat, and any other finish coat as approved by the Contracting Officer.

2.3 RECYCLABLE MATERIALS

The Contractor shall comply with EPA requirements in accordance with Section 01670 RECYCLED / RECOVERED MATERIALS.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Asbestos abatement work tasks shall be performed as shown on the detailed plans and

drawings (AM #0001 Contractor shall obtain approval from the COR for submittal required for each delivery order), as summarized in paragraph DESCRIPTION OF WORK and including Table 1 and the Contractor's Accident Prevention Plan, Asbestos Hazard Abatement Plan, and the Activity Hazard Analyses. The Contractor shall use the engineering controls and work practices required in 29 CFR 1926, Section .1101(g) in all operations regardless of the levels of exposure. Personnel shall wear and utilize protective clothing and equipment as specified. The Contractor shall not permit eating, smoking, drinking, chewing or applying cosmetics in the regulated area. All hot work (burning, cutting, welding, etc.) shall be conducted under controlled conditions in conformance with 29 CFR 1926, Section .352, Fire Prevention. Personnel of other trades, not engaged in asbestos abatement activities, shall not be exposed at any time to airborne concentrations of asbestos unless all the administrative and personal protective provisions of the Contractor's Accident Prevention Plan are complied with. Power to the regulated area shall be locked-out and tagged in accordance with 29 CFR 1910, and temporary electrical service with ground fault circuit interrupters shall be provided as needed. Temporary electrical service shall be disconnected when necessary for wet removal. The Contractor shall stop abatement work in the regulated area immediately when the airborne total fiber concentration: (1) equals or exceeds 0.01 f/cc, or the pre-abatement concentration, whichever is greater, outside the regulated area; or (2) equals or exceeds 1.0 f/cc inside the regulated area. The Contractor shall correct the condition to the satisfaction of the Contracting Officer, including visual inspection and air sampling. Work shall resume only upon notification by the Contracting Officer. Corrective actions shall be documented.

3.2 PROTECTION OF ADJACENT WORK OR AREAS TO REMAIN

Asbestos abatement shall be performed without damage to or contamination of adjacent work or area. Where such work or area is damaged or contaminated, as verified by the Contracting Officer using visual inspection or sample analysis, it shall be restored to its original condition or decontaminated by the Contractor at no expense to the Government, as deemed appropriate by the Contracting Officer. This includes inadvertent spill of dirt, dust or debris in which it is reasonable to conclude that asbestos may exist. When these spills occur, work shall stop in all effected areas immediately and the spill shall be cleaned. When satisfactory visual inspection and air sampling analysis results are obtained and have been evaluated by the Contractor's Designated IH and the Contracting Officer, work shall proceed.

3.3 OBJECTS

3.3.1 Removal of Mobile Objects

[Mobile objects, furniture, [_____] and equipment will be removed from the area of work by the Government before asbestos abatement work begins.] [DETAIL SHEET 27, contains a summary of Contractor's required handling, cleaning and storage and reinstallation of mobile objects, furniture and equipment located in each abatement area. Mobile objects and furnishings identified in DETAIL SHEET 27 [are] [are not] considered contaminated with asbestos fibers. Mobile objects and furnishings shall be precleaned using HEPA filtered vacuum followed by [wet wiping] [and] [or] [steam cleaning]. These objects shall be removed to an area or site designated on DETAIL SHEET 27 and as identified by the Contracting Officer, and stored; or other appropriate action taken as identified on DETAIL SHEET 27. Carpets, draperies, and other items which may not be suitable for onsite wet cleaning methods shall be [properly laundered in accordance with 29 CFR 1926, Section .1101] [disposed of as asbestos contaminated material].]

3.3.2 Stationary Objects

Stationary objects, furniture, [_____] and equipment as shown on DETAIL SHEET 27, shall remain in place [and shall be precleaned using HEPA vacuum followed by adequate wet wiping.] Stationary objects and furnishings shall be covered with 2 layers of polyethylene and edges sealed with duct tape.

3.3.3 Reinstallation of Mobile Objects

At the conclusion of the asbestos abatement work in each regulated area, and after meeting the final clearance requirements for each regulated area, objects previously removed shall be transferred back to the cleaned area from which they came in accordance with the storage code designation for that material as shown on DETAIL SHEET 27, and reinstalled.

3.4 BUILDING VENTILATION SYSTEM AND CRITICAL BARRIERS

Building ventilating systems supplying air into or returning air out of a regulated area shall be [shut down and isolated by lockable switch or other positive means in accordance with 29 CFR 1910, Section .147.] [isolated by airtight seals to prevent the spread of contamination throughout the system.] Air-tight critical barriers shall be installed on building ventilating openings located inside the regulated area that supply or return air from the building ventilation system or serve to exhaust air from the

building. The critical barriers shall consist of [air-tight rigid covers for building ventilation supply and exhaust grills where the ventilation system is required to remain in service during abatement] [2 layers of polyethylene]. Edges to wall, ceiling and floor surfaces shall be sealed with industrial grade duct tape. Critical barriers shall be installed as shown on drawings and appended SET-UP DETAIL SHEETS.

3.5 PRECLEANING

[Surfaces shall be [cleaned by HEPA vacuum] [and] [adequately wet wiped] prior to establishment of containment.] [The following surfaces [_____] shall be [_____].]

3.6 METHODS OF COMPLIANCE

3.6.1 Mandated Practices

The Contractor shall employ proper handling procedures in accordance with 29 CFR 1926 and 40 CFR 61, Subpart M, and the specified requirements. The specific abatement techniques and items identified shall be detailed in the Contractor's Asbestos Hazard Abatement Plan including, but not limited to, details of construction materials, equipment, and handling procedures. The Contractor shall use the following engineering controls and work practices in all operations, regardless of the levels of exposure:

- a. Vacuum cleaners equipped with HEPA filters to collect debris and dust containing ACM.
- b. Wet methods or wetting agents to control employee exposures during asbestos handling, mixing, removal, cutting, application, and cleanup; except where it can be demonstrated that the use of wet methods is unfeasible due to, for example, the creation of electrical hazards, equipment malfunction, and in roofing.
- c. Prompt clean-up and disposal in leak-tight containers of wastes and debris contaminated with asbestos.
- d. Inspection and repair of polyethylene in work and high traffic areas.
- e. Cleaning of equipment and surfaces of containers filled with ACM prior to removing them from the equipment room or area.

3.6.2 Control Methods

The Contractor shall use the following control methods to comply with the PELs:

- a. Local exhaust ventilation equipped with HEPA filter dust collection systems;
- b. Enclosure or isolation of processes producing asbestos dust;
- c. Ventilation of the regulated area to move contaminated air away from the breathing zone of employees and toward a filtration or collection device equipped with a HEPA filter;
- d. Use of other work practices and engineering controls;
- e. Where the feasible engineering and work practice controls described above are not sufficient to reduce employee exposure to or below the PELs, the Contractor shall use them to reduce employee exposure to the lowest levels attainable by these controls and shall supplement them by the use of respiratory protection that complies with paragraph, RESPIRATORY PROTECTION PROGRAM.

3.6.3 Unacceptable Practices

The following work practices and engineering controls shall not be used for work related to asbestos or for work which disturbs ACM, regardless of measured levels of asbestos exposure or the results of initial exposure assessments:

- a. High-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filtered exhaust air.
- b. Compressed air used to remove asbestos, or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air.
- c. Dry sweeping, shoveling, or other dry clean-up of dust and debris containing ACM.
- d. Employee rotation as a means of reducing employee exposure to asbestos.

3.6.4 Class I Work Procedures

In addition to requirements of paragraphs Mandated Practices and Control Methods, the following engineering controls and work practices shall be used:

- a. A Competent Person shall supervise the installation and operation of the control system.
- b. For jobs involving the removal of more than 25 feet or 10 square feet of TSI or surfacing material, the Contractor shall place critical barriers over all openings to the regulated area.
- c. HVAC systems shall be isolated in the regulated area by sealing with a double layer of plastic or air-tight rigid covers.
- d. Impermeable dropcloths (6 mil or greater thickness) shall be placed on surfaces beneath all removal activity.
- e. Objects within the regulated area shall be handled as specified in paragraph OBJECTS.
- f. Where a negative exposure assessment has not been provided or where exposure monitoring shows the PEL was exceeded, the regulated area shall be ventilated to move contaminated air away from the employee's breathing zone toward a HEPA unit or collection device.

3.6.5 Specific Control Methods for Class I Work

In addition to requirements of paragraph Class I Work Procedures, Class I asbestos work shall be performed using the control methods identified in the subparagraphs below.

3.6.5.1 Negative Pressure Enclosure (NPE) System

The NPE system shall be as shown in SETUP DETAIL SHEET [2] [3] [4] [8] AM #0001 (see submittal requirements for Detailed Drawings). The system shall provide at least 4 air changes per hour inside the containment. The local exhaust unit equipment shall be operated 24 hours per day until the containment is removed, and shall be leak-proof to the filter and equipped with HEPA filters. Air movement shall be directed away from the employees and toward a HEPA filtration device. The NPE shall be smoke tested for leaks at the beginning of each shift. Local exhaust equipment shall be sufficient to maintain a minimum pressure differential of minus 0.02 inch of water column relative to adjacent, unsealed areas. Pressure differential shall be monitored continuously, 24 hours per day, with an automatic manometric recording instrument. Pressure differential recordings shall be provided daily on the same day collected. Readings shall be reviewed by the Contractor's Designated Competent Person and IH prior to submittal. The Contracting Officer shall be notified immediately if the pressure differential falls below the prescribed minimum. The building ventilation system shall not be used as the local exhaust system for the regulated area. The local exhaust system shall terminate outdoors unless an alternate arrangement is allowed by the Contract Officer. All filters used shall be new at the beginning of the project and shall be periodically changed as necessary and disposed of as ACM waste.

3.6.5.2 Glovebag Systems

Glovebag systems shall be as shown in SETUP DETAIL SHEET 10. The glovebag system shall be used to remove ACM from straight runs of piping and elbows and other connections. Glovebags shall be used without modification and shall be smoke-tested for leaks and any leaks sealed prior to use. Glovebags shall be installed to completely cover the circumference of pipe or other structures where the work is to be done. Glovebags shall be used only once and shall not be moved. Glovebags shall not be used on surfaces that have temperatures exceeding 150 degrees F. Prior to disposal, glovebags shall be collapsed by removing air within them using a HEPA vacuum. Before beginning the operation, loose and friable material adjacent to the glovebag operation shall be wrapped and sealed in 2 layers of plastic or otherwise rendered intact. At least 2 persons shall perform Class I glovebag removal. Asbestos regulated work areas shall be established as specified and shown on detailed drawings and plans for glovebag abatement. Designated boundary limits for the asbestos work shall be established with rope or other continuous barriers and all other requirements for asbestos control areas shall be maintained, including area signage and boundary warning tape as specified in SET-UP DETAIL SHEET 11.

- a. In addition to requirements for negative pressure glovebag systems above, the Contractor shall attach HEPA vacuum systems or other devices to the bag to prevent collapse during removal of ACM from straight runs of piping and elbows and other connections.
- b. The negative pressure glove boxes used to remove ACM from pipe runs shall be fitted with gloved apertures and a bagging outlet and constructed with rigid

sides from metal or other material which can withstand the weight of the ACM and water used during removal. A negative pressure shall be created in the system using a HEPA filtration system. The box shall be smoke tested for leaks prior to each use.

3.6.5.3 Mini-Enclosures

[Single bulkhead containment] [Double bulkhead containment] [or] [Mini-containment (small walk-in enclosure)] as shown in SETUP DETAIL SHEET [5] [6] [7] to accommodate no more than 2 persons, may be used if the disturbance or removal can be completely contained by the enclosure with the following specifications and work practices. The mini-enclosure shall be inspected for leaks and smoke tested before each use. Air movement shall be directed away from the employee's breathing zone within the mini-enclosure.

3.6.5.4 Wrap and Cut Operation

Wrap and cut operations shall be as shown in SETUP DETAIL SHEET [9B] [10]. Prior to cutting pipe, the asbestos-containing insulation shall be wrapped with polyethylene and securely sealed with duct tape to prevent asbestos becoming airborne as a result of the cutting process. The following steps shall be taken: install glovebag, strip back sections to be cut 6 inches from point of cut, and cut pipe into manageable sections.

3.6.6 Class II Work

In addition to the requirements of paragraphs Mandated Practices and Control Methods, the following engineering controls and work practices shall be used:

- a. A Competent Person shall supervise the work.
- b. For indoor work, critical barriers shall be placed over all openings to the regulated area.
- c. Impermeable dropcloths shall be placed on surfaces beneath all removal activity.

3.6.7 Specific Control Methods for Class II Work

In addition to requirements of paragraph Class II Work, Class II work shall be performed using the following methods:

3.6.7.1 Vinyl and Asphalt Flooring Materials

When removing vinyl and asphalt flooring materials [which contain ACM] [from a building in which ACM has not been verified], the Contractor shall use the following practices as shown in RESPONSE ACTION DETAIL SHEET [56] [57] [58] [59] [60] [61] [62] [63] [64] **AM #0001 (see submittal requirements for Detailed Drawings)**. Resilient sheeting shall be removed by adequately wet methods. Tiles shall be removed intact (if possible); wetting is not required when tiles are heated and removed intact. Flooring or its backing shall not be sanded. Scraping of residual adhesive and/or backing shall be performed using wet methods. Mechanical chipping is prohibited unless performed in a negative pressure enclosure. Dry sweeping is prohibited. The Contractor shall use vacuums equipped with HEPA filter, disposable dust bag, and metal floor tool (no brush) to clean floors.

3.6.7.2 Roofing Material

When removing roofing materials which contain ACM as described in 29 CFR 1926, Section .1101(g)(8) the Contractor shall use the following practices as shown in RESPONSE ACTION DETAIL SHEET [74] [75]. Roofing material shall be removed in an intact state. Wet methods shall be used to remove roofing materials that are not intact, or that will be rendered not intact during removal, unless such wet methods are not feasible or will create safety hazards. When removing built-up roofs, with asbestos-containing roofing felts and an aggregate surface, using a power roof cutter, all dust resulting from the cutting operations shall be collected by a HEPA dust collector, or shall be HEPA vacuumed by vacuuming along the cut line. Asbestos-containing roofing material shall not be dropped or thrown to the ground, but shall be lowered to the ground via covered, dust-tight chute, crane, hoist or other method approved by the Contracting Officer. Any ACM that is not intact shall be lowered to the ground as soon as practicable, but not later than the end of the work shift. While the material remains on the roof it shall be kept wet or placed in an impermeable waste bag or wrapped in plastic sheeting. Intact ACM shall be lowered to the ground as soon as practicable, but not later than the end of the work shift. Unwrapped material shall be transferred to a closed receptacle precluding the dispersion of dust. Critical barriers shall be placed over roof level heating and ventilation air intakes.

3.6.7.3 Cementitious Siding and Shingles or Transite Panels

When removing cementitious asbestos-containing siding, shingles or transite panels the

Contractor shall use the following practices shown in RESPONSE ACTION DETAIL SHEET [81] [82] [83]. Intentionally cutting, abrading or breaking siding, shingles, or transite panels is prohibited. Each panel or shingle shall be sprayed with amended water prior to removal. Nails shall be cut with flat, sharp instruments. Unwrapped or unbagged panels or shingles shall be immediately lowered to the ground via covered dust-tight chute, crane or hoist, or placed in an impervious waste bag or wrapped in plastic sheeting and lowered to the ground no later than the end of the work shift.

3.6.7.4 Gaskets

Gaskets shall be thoroughly wetted with amended water prior to removal and immediately placed in a disposal container. If a gasket is visibly deteriorated and unlikely to be removed intact, removal shall be undertaken within a glovebag. Any scraping to remove residue shall be performed wet.

3.6.7.5 Other Class II Jobs

The Contractor shall use the following work practices when performing Class II removal of [_____] ACM: The material shall be thoroughly wetted with amended water prior and during its removal. The material shall be removed in an intact state. Cutting, abrading or breaking the material is prohibited. The ACM removed shall be immediately bagged or wrapped.

3.6.8 Specific Control Methods for Class III Work

Class III asbestos work shall be conducted using engineering and work practice controls which minimize the exposure to employees performing the asbestos work and to bystander employees. The work shall be performed using wet methods and, to the extent feasible, using local exhaust ventilation. The Contractor shall use impermeable dropcloths and shall isolate the operation, using mini-enclosures or glovebag systems, where the disturbance involves drilling, cutting, abrading, sanding, chipping, breaking, or sawing of TSI or surfacing material.

3.6.9 Specific Control Methods for Class IV Work

Class IV jobs shall be conducted using wet methods, HEPA vacuums, and prompt clean-up of debris containing ACM. Employees cleaning up debris and waste in a regulated area where respirators are required shall wear the selected respirators.

3.6.10 Alternative Methods for Roofing Materials and Asphaltic Wrap

The Contractor shall use the following engineering controls and work practices when removing, repairing, or maintaining intact pipeline asphaltic wrap, or roof cements, mastics, coatings, or flashings which contain asbestos fibers encapsulated or coated by bituminous or resinous compounds. If during the course of the job the material does not remain intact, the Contractor shall use the procedures described in paragraph Roofing Material. Before work begins, and as needed during the job, the Designated Competent Person shall conduct an inspection and determine that the roofing material is intact and will likely remain intact. The material shall not be sanded, abraded, or ground. Manual methods which would render the material non-intact shall not be used. Roofing material shall not be dropped or thrown to the ground but shall be lowered via covered, dust-tight chute, crane, hoist or other method approved by the Contracting Officer. All such material shall be removed from the roof as soon as practicable, but not later than the end of the work shift. Removal or disturbance of pipeline asphaltic wrap shall be performed using wet methods.

3.6.11 Cleaning After Asbestos Removal

After completion of all asbestos removal work, surfaces from which ACM has been removed shall be wet wiped or sponged clean, or cleaned by some equivalent method to remove all visible residue. Run-off water shall be collected and filtered through a dual filtration system. A first filter shall be provided to remove fibers 20 micrometers and larger, and a final filter provided that removes fibers 5 micrometers and larger. After the gross amounts of asbestos have been removed from every surface, remaining visible accumulations of asbestos on floors shall be collected using plastic shovels, rubber squeegees, rubber dustpans, and HEPA vacuum cleaners as appropriate to maintain the integrity of the regulated area. When TSI and surfacing material has been removed, workmen shall use HEPA vacuum cleaners to vacuum every surface. Surfaces or locations which could harbor accumulations or residual asbestos dust shall be checked after vacuuming to verify that no asbestos-containing material remains; and shall be re-vacuumed as necessary to remove the ACM.

3.6.12 Class I Asbestos Work Response Action Detail Sheets

The following Class I Asbestos Work Response Action Detail Sheet is specified on Table 1 for each individual work task to be performed:

- a. Troweled Wall Plaster on Masonry: See Sheet 32
- b. Troweled Wall Plaster on Stud Wall: See Sheet 33
- c. Troweled Ceiling Plaster on Structural Substrate: See Sheet 35
- d. Troweled Ceiling Plaster on Hung Ceiling: See Sheet 36
- e. Acoustical Wall Plaster on Masonry: See Sheet 42
- f. Acoustical Ceiling Plaster (Non-Asbestos Substrate): See Sheet 44
- g. Asbestos Decorative Paint on Plaster: See Sheet 46
- h. Asbestos-contaminated Masonry for Masonry Chimney: See Sheet 50
- i. Asbestos-contaminated Masonry Wall or Thermal Insulation: See Sheet 51
- j. Fireproofing or Thermal Surface Insulation: See Sheet 68
- k. Acoustical Ceiling Insulation: See Sheet 70
- l. Exterior Asbestos Stucco: See Sheet 79
- m. Duct Insulation: Duct work insulation removal shall not begin without the written authorization of the Contracting Officer stating that the HVAC system to be worked on is either isolated or inoperative and locked out of service. Forced air circulation is not permitted in ductwork while abatement work is in progress. See Sheet 101
- n. Pipe Insulation (Using a Glovebag): See Sheet 87
- o. Horizontal Pipe Insulation (Using a Containment Area): See Sheet 88
- p. Pipe Insulation (Using a Mini-Containment Area): See Sheet 89
- q. Storage Tank and Boiler Breeching Insulation: See Sheet 93. Written approval shall be obtained from the Contracting Officer before start of work on tanks and boiler breeching. The Contracting Officer will ensure that tanks and boilers have been valved off or shut down and allowed a sufficient amount of time to cool down. Insulation shall be sprayed with a mist of amended water or removal encapsulant. Amended water or removal encapsulant shall be allowed to saturate material to substrate. Bands or wires holding breeching or insulation to equipment shall be cut. Cover jackets shall be slit at seams, and sections removed and hand-placed in a polyethylene disposable bag. Exposed surfaces shall be continuously sprayed with amended water to minimize airborne dust. Insulation on tanks and boiler breeching shall not be allowed to drop to the floor. Residue shall be removed from tank and boiler surfaces. A water stream shall be used to dislodge insulation in joints or irregular spaces that cannot be reached with tools. Lagging on piping and insulation on fittings shall be removed. A penetrating encapsulant shall be sprayed on all exposed tank, boiler and boiler breeching surfaces.
- r. Troweled Wall Plaster on Studs: See Sheet 30
- s. Troweled Ceiling or Wall Plaster on Masonry: See Sheet 31
- t. Acoustical Ceiling on Wall Plaster: See Sheet 41
- u. Interior Stucco: See Sheet 78
- v. Exterior Stucco: See Sheet 80
- w. Pipe and Fitting Insulation (using Glovebag): See Sheet 86
- x. Storage Tank and Boiler Breeching: See Sheet 92
- y. Duct Insulation: See Sheet 100.

3.6.13 Class II Asbestos Work Response Action Detail Sheets

The following Class II Asbestos Work Response Action Detail Sheet is specified on Table 1 for each individual work task to be performed:

- a. Light Curtain: See Sheet 47
- b. Interior Asbestos Cement, Fiberboard and Drywall Panels: See Sheet 48

- c. Suspended Asbestos Cement Ceiling Tile: See Sheet 52
- d. Asbestos Cement Architectural Products: See Sheet 53
- e. Glued-on Acoustical Ceiling and Wall Tile: See Sheet 55
- f. Suspended Acoustical Ceiling Tile: See Sheet 54
- g. Vinyl or Vinyl Asbestos Tile Adhered to Concrete Floor System by Asbestos-Containing Adhesive: See Sheet 56
- h. Vinyl or Vinyl Asbestos Tile Adhered to Wood Floor System by Asbestos Containing Adhesive: See Sheet 60
- i. Vinyl Asbestos Tile Adhered to Concrete Floor System by Asbestos Containing Adhesive: See Sheet 57
- j. Vinyl Asbestos Tile Adhered to Concrete Floor System by Asbestos Free Adhesive: See Sheet 58
- k. Vinyl Asbestos Tile and Chemical Dissolution of Asbestos-Containing Adhesives on Concrete Floor System: See Sheet 59
- l. Vinyl Asbestos Tile Adhered to Wood Floor System by Asbestos-Containing Adhesive: See Sheet 61
- m. Vinyl Asbestos Tile Adhered to Wood Floor System by Asbestos Free Adhesive: See Sheet 62
- n. Sheet Flooring Adhered Wood Floor System: See Sheet 63
- o. Asbestos-Containing Sheet Flooring Adhered to Concrete Floor System by Asbestos-Containing Adhesive: See Sheet 64
- p. Carpeting (Asbestos-Containing or Contaminated): See Sheet 65
- q. Miscellaneous Asbestos-Containing Materials: See Sheet 45
- r. Built-Up Roofing and Flashing: See Sheet 74
- s. Roof, Shingles and Underlayment: See Sheet 75
- t. Asbestos Cement Siding: See Sheet 81
- u. Asbestos Cement Roofing: See Sheet 82
- v. Asbestos-Containing Walkway Cover: See Sheet 83
- w. Asbestos-Contaminated Metal Siding: See Sheet 84
- x. Asbestos Cement Sunscreen Louvers: See Sheet 85
- y. Electrical Wiring and Fixtures: See Sheet 95
- z. Asbestos Insulated Electrical Fixture: See Sheet 96
- aa. Boiler Firebox Insulation: The asbestos-containing boiler firebox lining shall be removed from out-of-service boilers before the boiler is dismantled: See Sheet 97.

3.6.14 Abatement of Asbestos Contaminated Soil

[Asbestos contaminated soil shall be removed from areas to a minimum depth of [2] [_____] inches. Soil shall be thoroughly dampened with amended water and then removed by manual shoveling into labeled containers. The workers shall be closely monitored for heat exhaustion. The minimum ventilation shall be 8 air changes per hour through a local exhaust HEPA system. See DETAIL SHEET 73.] [The Contractor has the option to propose encapsulation of soil instead of removal. Since soil encapsulation is highly dependent on soil chemistry, available skills for application and proprietary products, the Contractor shall first test the proposed soil encapsulant on a minimum 100 square feet of soil area onsite. The test shall be witnessed by the Contracting Officer's and the manufacturer's representative. A written application for encapsulation shall be submitted to the Contracting Officer with test results, encapsulant manufacturer's positive recommendation for use, a guarantee for satisfactory performance for 10 years, and limitation of application. The Contracting Officer reserves the right to accept or reject the application with no effect to the contract. If the application is accepted,

the soil encapsulation shall proceed in compliance with all provisions and instructions of the encapsulant manufacturer and under the supervision of a person certified by the manufacturer who is trained and experienced in the proper application of the soil encapsulant. See DETAIL SHEET 72.] [A concrete slab of minimum [2] [_____] inch thickness shall be poured over the entire soil surface. Soil surface shall be thoroughly dampened before pouring concrete. Soil encapsulators and supervisors shall be primarily concrete workers trained to work in asbestos contaminated environments. See DETAIL SHEET 71.]

3.6.15 Enclosure of ACM

Isolation of ACM by construction of a permanent enclosure shall be conducted as specified in Section [_____] . Enclosures shall be as follows:

- a. Enclosure of Acoustical Wall Plaster on Masonry Wall: See Detail Sheet 37
- b. Enclosure of Asbestos Contaminated Soil: See Detail Sheet 71
- c. Enclosure of Acoustical Ceiling Plaster, Spray-on Fireproofing and Thermal Insulation Plaster: See Detail Sheet 43.

3.6.16 Encapsulation of ACM

Prior to applying any encapsulant, the entire surface area shall be inspected for loose, or damaged asbestos material:

- a. Penetrating Encapsulation: Before penetrating encapsulation is applied, asbestos removal work in the area shall be complete and the surfaces to be encapsulated shall be free of loose or damaged material. Substrate shall be evaluated before application to ensure that the encapsulant will not cause the substrate to fail in any way. Acoustical wall and ceiling plaster surfaces shall be encapsulated in accordance with manufacturer's recommendations. Plug samples shall be taken to determine if full penetration has been achieved. If full penetration has not been achieved, surfaces shall be recoated while the matrix is still wet, until full penetration is achieved: See Detail Sheet 39.
- b. Bridging Encapsulation: Prior to applying the bridging encapsulant, the pre-encapsulation inspection shall be performed. The surface shall be encapsulated in sections of 1000 square feet or less as recommended by the encapsulant manufacturer. Upon completion of each section, the dry thickness of the bridging encapsulation shall be measured. Additional bridging encapsulant shall be applied to obtain the desired encapsulant thickness. Additional coats shall blend with the original bridging encapsulant. Bridging encapsulation shall include:
 - (1) Troweled Wall Plaster: See Detail Sheet 29
 - (2) Troweled Ceiling Plaster: See Detail Sheet 34
 - (3) Acoustical Wall Plaster: See Detail Sheet 38
 - (4) Acoustical Ceiling Plaster: See Detail Sheet 34
 - (5) Asbestos Cement Wall, Fiberboard and Drywall Panels: See Detail Sheet 49
 - (6) Exterior Asbestos Stucco: See Detail Sheet 76
 - (7) Interior Asbestos Stucco: See Detail Sheet 77
 - (8) Storage Tank and Boiler Breeching: See Detail Sheet 91
 - (9) Boiler and Piping Gasket: See Detail Sheet 98.

3.6.17 Combination Encapsulation of Acoustical Wall and Ceiling Plaster

The combination penetrating/bridging encapsulation system shall be installed by first applying the penetrating encapsulant and then the bridging encapsulant: See Detail Sheet 40.

3.6.18 Response Action Detail Sheets for Repair of Class I Materials

- a. Troweled Wall Plaster on Studs: See Detail Sheet 30
- b. Troweled Ceiling or Wall Plaster on Masonry: See Detail Sheet 31
- c. Acoustical Ceiling on Wall Plaster: See Detail Sheet 41
- d. Interior Stucco: See Detail Sheet 78
- e. Exterior Stucco: See Detail Sheet 80
- f. Pipe and Fitting Insulation (using Glovebag): See Detail Sheet 86
- g. Storage Tank and Boiler Breeching: See Detail Sheet 92

- h. Duct Insulation: See Detail Sheet 100
- i. Exposed Pipe Insulation Edges: Asbestos insulation to remain shall have exposed edges contained; the following steps shall be performed: Wet and cut the rough ends true and square with sharp tools and then encapsulate the edges with a 1/4 inch thick layer of non-asbestos-containing insulating cement troweled to a smooth hard finish; when cement is dry, lag the end with a layer of non-asbestos lagging cloth, overlapping the existing ends by 4 inches.

3.6.19 Response Action Detail Sheets for Repair of Class II Materials

- a. Vinyl or Vinyl Asbestos Tile Adhered to Concrete Floor System by Asbestos-Containing Adhesive: See Detail Sheet 56
- b. Vinyl or Vinyl Asbestos Tile Adhered to Wood Floor System by Asbestos Containing Adhesive: See Detail Sheet 60.

3.6.20 Encasement of ACM

Prior to applying the first layer of the polymer system, the structural stability of the ACM shall be verified. Encasement materials shall not be applied until all removal work within the regulated area has been completed. Mechanical fasteners shall be installed to wall, mesh or deck as needed. A low density cellular or polymer shall be applied to a depth of approximately 1 inch. The asbestos substrate shall be completely encased. A polymer finish containing fiberglass shall be applied over the low density cellular foam to a thickness of 1 inch. All system components shall be applied according to the system manufacturer's instructions and data. Encased material shall be decontaminated. Encasement shall be applied to:

- a. Beams and Decking: See Detail Sheet 66
- b. Columns: See Detail Sheet 67
- c. Acoustical Ceiling Insulation: See Detail Sheet 69
- d. Storage Tank and Boiler Breeching: See Detail Sheet 90.

3.6.21 Sealing Contaminated Items Designated for Disposal

Contaminated architectural, mechanical, and electrical appurtenances such as Venetian blinds, full height partitions, carpeting, duct work, pipes and fittings, radiators, light fixtures, conduit panels, and other contaminated items designated for removal shall be coated with an asbestos lockdown encapsulant at the demolition site before being removed from the asbestos control area. These items [shall] [shall not] be vacuumed prior to application of the lockdown encapsulant. The asbestos lockdown encapsulant shall be tinted a contrasting color and shall be spray applied by airless method. Thoroughness of sealing operation shall be visually gauged by the extent of colored coating on exposed surfaces.

3.7 FINAL CLEANING AND VISUAL INSPECTION

Upon completion of abatement, the regulated area shall be cleaned by collecting, packing, and storing all gross contamination; see SET-UP DETAIL SHEETS 9, 14 and 20. A final cleaning shall be performed using HEPA vacuum and wet cleaning of all exposed surfaces and objects in the regulated area. Upon completion of the cleaning, the Contractor shall conduct a visual pre-inspection of the cleaned area in preparation for a final inspection before final air clearance monitoring and recleaning, as necessary. Upon completion of the final cleaning, the Contractor and the Contracting Officer shall conduct a final visual inspection of the cleaned regulated area in accordance with ASTM E 1368 and document the results on the Final Cleaning and Visual Inspection as specified on the SET-UP DETAIL SHEET 19. If the Contracting Officer rejects the clean regulated area as not meeting final cleaning requirements, the Contractor shall reclean as necessary and have a follow-on inspection conducted with the Contracting Officer. Recleaning and follow-up reinspection shall be at the Contractor's expense.

3.8 LOCKDOWN

Prior to removal of plastic barriers and after clean-up of gross contamination and final visual inspection, a post removal (lockdown) encapsulant shall be spray applied to ceiling, walls, floors, and other surfaces in the regulated area.

3.9 EXPOSURE ASSESSMENT AND AIR MONITORING

3.9.1 General Requirements For Exposure

Exposure assessment, air monitoring and analysis of airborne concentration of asbestos fibers shall be performed in accordance with 29 CFR 1926, Section .1101, the

Contractor's air monitoring plan, and as specified. Personal exposure air monitoring (collected at the breathing zone) that is representative of the exposure of each employee who is assigned to work within a regulated area shall be performed by the Contractor's Designated IH. Breathing zone samples shall be taken for at least 25 percent of the workers in each shift, or a minimum of 2, whichever is greater. Air monitoring results at the 95 percent confidence level shall be calculated as shown in Table 2 at the end of this section. **AM #0001** ____ The **AM #0001 abatement Contractor** shall provide an **AM #0001** ____ independent **AM #0001 third party** testing laboratory with qualified analysts and appropriate equipment to conduct sample analyses of air samples using the methods prescribed in 29 CFR 1926, Section .1101, to include NIOSH Pub No. 84-100 Method 7400. Preabatement and abatement environmental air monitoring shall be performed by the **AM #0001 IHT under the guidance of Designated IH, and both personnel shall belong to a third party exposure assessment and air monitoring firm independent from the abatement Contractor.** Final clearance environmental air monitoring, shall be performed by the **AM #0001 IHT under the guidance of Designated IH and both personnel shall belong to a third party exposure assessment and air monitoring firm independent of the abatement Contractor.** Environmental and final clearance air monitoring shall be performed using NIOSH Pub No. 84-100 Method 7400 (PCM) with optional confirmation of results by [NIOSH Pub No. 84-100 Method 7402 (TEM)] [the EPA TEM Method specified in 40 CFR 763]. For environmental and final clearance, air monitoring shall be conducted at a sufficient velocity and duration to establish the limit of detection of the method used at 0.005 f/cc. Confirmation of asbestos fiber concentrations (asbestos f/cc) from environmental and final clearance samples collected and analyzed by NIOSH Pub No. 84-100 Method 7400 (total f/cc) may be conducted using TEM in accordance with NIOSH Pub No. 84-100 Method 7402. When such confirmation is conducted, it shall be from the same sample filter used for the NIOSH Pub No. 84-100 Method 7400 PCM analysis. For all Contractor required environmental or final clearance air monitoring, confirmation of asbestos fiber concentrations, using NIOSH Pub No. 84-100 Method 7402, shall be at the Contractor's expense. Monitoring may be duplicated by the Government at the discretion of the Contracting Officer. Results of breathing zone samples shall be posted at the job site and made available to the Contracting Officer. The Contractor shall maintain a fiber concentration inside a regulated area less than or equal to 0.1 f/cc expressed as an 8 hour, time-weighted average (TWA) during the conduct of the asbestos abatement. If fiber concentration rises above 0.1 f/cc, work procedures shall be investigated with the Contracting Officer to determine the cause. At the discretion of the Contracting Officer, fiber concentration may exceed 0.1 f/cc but shall not exceed 1.0 f/cc expressed as an 8-hour TWA. The Contractor's workers shall not be exposed to an airborne fiber concentration in excess of 1.0 f/cc, as averaged over a sampling period of 30 minutes. Should either an environmental concentration of 1.0 f/cc expressed as an 8-hour TWA or a personal excursion concentration of 1.0 f/cc expressed as a 30-minute sample occur inside a regulated work area, the Contractor shall stop work immediately, notify the Contracting Officer, and implement additional engineering controls and work practice controls to reduce airborne fiber levels below prescribed limits in the work area. Work shall not restart until authorized by the Contracting Officer.

3.9.2 Initial Exposure Assessment

AM #0001 ____ An exposure assessment immediately before or at the initiation of an asbestos abatement operation to ascertain expected exposures during that operation. The assessment shall be completed in time to comply with the requirements which are triggered by exposure data or the lack of a negative exposure assessment, and to provide information necessary to assure that all control systems planned are appropriate for that operation. The assessment shall take into consideration both the monitoring results and all observations, information or calculations which indicate employee exposure to asbestos, including any previous monitoring conducted in the workplace, or of the operations of the Contractor which indicate the levels of airborne asbestos likely to be encountered on the job. [For Class I asbestos work, until the employer conducts exposure monitoring and documents that employees on that job will not be exposed in excess of PELs, or otherwise makes a negative exposure assessment, the Contractor shall presume that employees are exposed in excess of the PEL-TWA and PEL-Excursion Limit.]

3.9.3 Negative Exposure Assessment

The Contractor shall provide a negative exposure assessment for the specific asbestos job which will be performed. The negative exposure assessment shall be provided within [____] days of the initiation of the project and conform to the following criteria:

- a. Objective Data: Objective data demonstrating that the product or material containing asbestos minerals or the activity involving such product or material cannot release airborne fibers in concentrations exceeding the PEL-TWA and PEL-Excursion Limit under those work conditions having the greatest potential for releasing asbestos.
- b. Prior Asbestos Jobs: Where the Contractor has monitored prior asbestos jobs for the PEL and the PEL-Excursion Limit within 12 months of the current job, the

monitoring and analysis were performed in compliance with asbestos standard in effect; the data were obtained during work operations conducted under workplace conditions closely resembling the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the Contractor's current operations; the operations were conducted by employees whose training and experience are no more extensive than that of employees performing the current job; and these data show that under the conditions prevailing and which will prevail in the current workplace, there is a high degree of certainty that the monitoring covered exposure from employee exposures will not exceed the PEL-TWA and PEL-Excursion Limit.

- c. Initial Exposure Monitoring: The results of initial exposure monitoring of the current job, made from breathing zone air samples that are representative of the 8-hour PEL-TWA and 30-minute short-term exposures of each employee. The monitoring covered exposure from operations which are most likely during the performance of the entire asbestos job to result in exposures over the PELs.

3.9.4 **AM #0001 _____ . NOT APPLICABLE**

AM #0001 _____ .

3.9.5 Preabatement Environmental Air Monitoring

Preabatement environmental air monitoring shall be established [1 day] [_____] prior to the masking and sealing operations for each regulated area to determine background concentrations before abatement work begins. As a minimum, preabatement air samples shall be collected using NIOSH Pub No. 84-100 Method 7400, PCM at these locations: outside the building; inside the building, but outside the regulated area perimeter; and inside each regulated work area. One sample shall be collected for every 2000 square feet of floor space. At least 2 samples shall be collected outside the building: at the exhaust of the HEPA unit; and downwind from the abatement site. The PCM samples shall be analyzed within 24 hours; and if any result in fiber concentration greater than 0.01 f/cc, asbestos fiber concentration shall be confirmed using NIOSH Pub No. 84-100 Method 7402 (TEM).

3.9.6 Environmental Air Monitoring During Abatement

Until an exposure assessment is provided to the Contracting Officer, environmental air monitoring shall be conducted at locations and frequencies that will accurately characterize any evolving airborne asbestos fiber concentrations. The assessment shall demonstrate that the product or material containing asbestos minerals, or the abatement involving such product or material, cannot release airborne asbestos fibers in concentrations exceeding 0.01 f/cc as a TWA under those work conditions having the greatest potential for releasing asbestos. The monitoring shall be at least once per shift at locations including, but not limited to, close to the work inside a regulated area; preabatement sampling locations; outside entrances to a regulated area; close to glovebag operations; representative locations outside of the perimeter of a regulated area; inside clean room; and at the exhaust discharge point of local exhaust system ducted to the outside of a containment (if used). If the sampling outside regulated area shows airborne fiber levels have exceeded background or 0.01 f/cc, whichever is greater, work shall be stopped immediately, and the Contracting Officer notified. The condition causing the increase shall be corrected. Work shall not restart until authorized by the Contracting Officer.

3.9.7 Final Clearance Air Monitoring

Prior to conducting final clearance air monitoring, the Contractor and the Contracting Officer shall conduct a final visual inspection of the regulated area where asbestos abatement has been completed. The final visual inspection shall be as specified in SET-UP DETAIL SHEET 19. Final clearance air monitoring shall not begin until acceptance of the Contractor's final cleaning by the Contracting Officer. **AM # 0001 The abatement Contractor independent third party exposure assessment and air monitoring firm shall** conduct the final clearance air monitoring using aggressive air sampling techniques as defined in EPA 560/5-85-024 or as otherwise required by federal or state requirements. The sampling and analytical method used will be [NIOSH Pub No. 84-100 Method 7400 (PCM) and Table 3 with confirmation of results by NIOSH Pub No. 84-100 Method 7402 (TEM).] [the EPA TEM Method specified at 40 CFR 763 and Table 4.]

3.9.7.1 Final Clearance Requirements, NIOSH PCM Method

For PCM sampling and analysis using NIOSH Pub No. 84-100 Method 7400, the fiber concentration inside the abated regulated area, for each airborne sample, shall be less than 0.01 f/cc. The abatement inside the regulated area is considered complete when every PCM final clearance sample is below the clearance limit. If any sample result is greater than 0.01 total f/cc, the asbestos fiber concentration (asbestos f/cc) shall be confirmed from that same filter using NIOSH Pub No. 84-100 Method 7402 (TEM) at

Contractor's expense. If any confirmation sample result is greater than 0.01 asbestos f/cc, abatement is incomplete and cleaning shall be repeated. Upon completion of any required recleaning, resampling with results to meet the above clearance criteria shall be done.

3.9.7.2 Final Clearance Requirements, EPA TEM Method

For EPA TEM sampling and analysis, using the EPA Method specified in 40 CFR 763, abatement inside the regulated area is considered complete when the arithmetic mean asbestos concentration of the 5 inside samples is less than or equal to 70 structures per square millimeter (70 S/mm). When the arithmetic mean is greater than 70 S/mm, the 3 blank samples shall be analyzed. If the 3 blank samples are greater than 70 S/mm, resampling shall be done. If less than 70 S/mm, the 5 outside samples shall be analyzed and a Z-test analysis performed. When the Z-test results are less than 1.65, the decontamination shall be considered complete. If the Z-test results are more than 1.65, the abatement is incomplete and cleaning shall be repeated. Upon completion of any required recleaning, resampling with results to meet the above clearance criteria shall be done.

3.9.7.3 Air Clearance Failure

If clearance sampling results fail to meet the final clearance requirements, the Contractor shall pay all costs associated with the required recleaning, resampling, and analysis, until final clearance requirements are met.

3.9.8 Air-Monitoring Results and Documentation

Air sample fiber counting shall be completed and results provided within 24 hours (breathing zone samples), and [_____] hours (environmental/clearance monitoring) after completion of a sampling period. The Contracting Officer shall be notified immediately of any airborne levels of asbestos fibers in excess of established requirements. Written sampling results shall be provided within 5 working days of the date of collection. The written results shall be signed by testing laboratory analyst, testing laboratory principal and the AM #0001 the abatement Contractor's independent third party exposure assessment and air monitoring firm's Designated IH certified in the State of Louisiana. The air sampling results shall be documented on a Contractor's daily air monitoring log. The daily air monitoring log shall contain the following information for each sample:

- a. Sampling and analytical method used;
- b. Date sample collected;
- c. Sample number;
- d. Sample type: BZ = Breathing Zone (Personal), P = Preabatement, E = Environmental, C = Abatement Clearance;
- e. Location/activity/name where sample collected;
- f. Sampling pump manufacturer, model and serial number, beginning flow rate, end flow rate, average flow rate (L/min);
- g. Calibration date, time, method, location, name of calibrator, signature;
- h. Sample period (start time, stop time, elapsed time (minutes));
- i. Total air volume sampled (liters);
- j. Sample results (f/cc and S/mm square) if EPA methods are required for final clearance;
- k. Laboratory name, location, analytical method, analyst, confidence level. In addition, the printed name and a signature and date block for the Industrial Hygienist who conducted the sampling and for the Industrial Hygienist who reviewed the daily air monitoring log verifying the accuracy of the information.

3.10 CLEARANCE CERTIFICATION

When asbestos abatement is complete, ACM waste is removed from the regulated areas, and final clean-up is completed, the Contracting Officer will certify the areas as safe before allowing the warning signs and boundary warning tape to be removed. After final clean-up and acceptable airborne concentrations are attained, but before the HEPA unit is turned off and the containment removed, the [Contractor shall] [Government will] remove all pre-filters on the building HVAC system and provide new pre-filters. The Contractor shall dispose of such filters as asbestos contaminated materials. HVAC, mechanical, and electrical systems shall be re-established in proper working order. The

Contractor and the Contracting Officer shall visually inspect all surfaces within the containment for residual material or accumulated debris. The Contractor shall reclean all areas showing dust or residual materials. The Contracting Officer will certify in writing that the area is safe before unrestricted entry is permitted. The Government will have the option to perform monitoring to certify the areas are safe before entry is permitted.

3.11 CLEANUP AND DISPOSAL

3.11.1 Title to ACM Materials

ACM material resulting from abatement work, except as specified otherwise, shall become the property of the Contractor and shall be disposed of as specified and in accordance with applicable federal, state and local regulations.

3.11.2 Collection and Disposal of Asbestos

All ACM waste shall be collected and including contaminated wastewater filters, scrap, debris, bags, containers, equipment, and asbestos contaminated clothing, shall be collected and placed in leak-tight containers such as double plastic bags (see DETAIL SHEET 9A); sealed double wrapped polyethylene sheet (see DETAIL 9B); sealed fiberboard boxes (see DETAIL SHEET 9C); or other approved containers. Waste within the containers shall be wetted in case the container is breached. Asbestos-containing waste shall be disposed of [at an EPA, state and local approved asbestos landfill] [off Government property]. For temporary storage, sealed impermeable containers shall be stored in an asbestos waste load-out unit or in a storage/transportation conveyance (i.e., dumpster, roll-off waste boxes, etc.) in a manner acceptable to and in an area assigned by the Contracting Officer. Procedure for hauling and disposal shall comply with 40 CFR 61, Subpart M, state, regional, and local standards.

3.11.3 Scale Weight Measurement

Scales used for measurement shall be public scales. Weighing shall be at a point nearest the work at which a public scale is available. Scales shall be standard truck scales of the beam type; scales shall be equipped with the type registering beam and an "over and under" indicator; and shall be capable of accommodating the entire vehicle. Scales shall be tested, approved and sealed by an inspector of the State of [_____]. Scales shall be calibrated and resealed as often as necessary and at least once every three months to ensure continuous accuracy. Vehicles used for hauling ACM shall be weighed empty daily at such time as directed and each vehicle shall bear a plainly legible identification mark.

3.11.4 Weigh Bill and Delivery Tickets

Copies of weigh bills and delivery tickets shall be submitted to the Contracting Officer during the progress of the work. The Contractor shall furnish the Contracting Officer scale tickets for each load of ACM weighed and certified. These tickets shall include tare weight; identification mark for each vehicle weighed; and date, time and location of loading and unloading. Tickets shall be furnished at the point and time individual trucks arrive at the worksite. A master log of all vehicle loading shall be furnished for each day of loading operations. Before the final statement is allowed, the Contractor shall file with the Contracting Officer certified weigh bills and/or certified tickets and manifests of all ACM actually disposed by the Contractor for this contract.

3.11.5 Asbestos Waste Shipment Record

The Contractor shall complete and provide the Contracting Officer final completed copies of the Waste Shipment Record for all shipments of waste material as specified in 40 CFR 61, Subpart M and other required state waste manifest shipment records, within 3 days of delivery to the landfill. Each Waste Shipment Record shall be signed and dated by the [Contractor] [Contracting Officer], the waste transporter and disposal facility operator.

TABLE 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet _____ of _____

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER _____
2. LOCATION OF WORK TASK _____
3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: _____

a. Type of Asbestos _____
b. Percent asbestos content _____%
4. ABATEMENT TECHNIQUE TO BE USED _____
5. OSHA ASBESTOS WORK CLASS DESIGNATION FOR WORK TASK _____
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK
Friable _____ Non-friable Category I _____
Non-friable Category II _____
7. FORM _____ and CONDITION OF ACM: GOOD _____ FAIR _____ POOR _____
8. QUANTITY: METERS _____, SQUARE METERS _____
- 8a. QUANTITY: LINEAR FT. _____, SQUARE FT. _____
9. RESPONSE ACTION DETAIL SHEET NUMBER FOR WORK TASK _____
10. SET-UP DETAIL SHEET NUMBERS
FOR WORK TASK _____, _____, _____, _____,
_____, _____, _____, _____.

NOTES:

- (1) Numeric sequence of individual work tasks (1,2,3,4, etc.) for each regulated area. Each category of EPA friability/OSHA class has a separate task.
- (2) Specific location of work (building, floor, area, e.g., Building 1421, 2nd Floor, Rm 201)
- (3) A description of material to be abated (example: horizontal pipe, cement wall panels, tile, stucco, etc.) type of asbestos (chrysotile, amosite, crocidolite, etc.); and % asbestos content.
- (4) Technique to be used: Removal = REM; Encapsulation = ENCAP; Encasement = ENCAS; Enclosure = ENCL; Repair = REP.
- (5) Class designation: Class I, II, III, or IV (OSHA designation).
- (6) Friability of materials: Check the applicable EPA NESHAP friability designation.
- (7) Form: Interior or Exterior Architectural = IA or EA; Mechanical/Electrical = ME.
Condition: Good = G; Fair = F; Poor = P.
- (8) Quantity of ACM for each work task in meters or square meters.
- (8a) Quantity of ACM for each work task in linear feet or square feet.
- (9) Response Action Detail Sheet specifies the material to be abated and the methods to be used. There is only one Response Action Detail Sheet for each abatement task.
- (10) Set-up Detail Sheets indicate containment and control methods used in support of the response action (referenced in the selected Response Action Detail Sheet).

TABLE 2

FORMULA FOR CALCULATION OF THE 95 PERCENT CONFIDENCE LEVEL
(Reference: NIOSH 7400)

$$\text{Fibers/cc(01.95 percent CL)} = X + [(X) * (1.645) * (CV)]$$

Where: $X = ((E)(AC))/((V)(1000))$

$$E = ((F/Nf) - (B/Nb))/Af$$

CV = The precision value; 0.45 shall be used unless the analytical laboratory provides the Contracting Officer with documentation (Round Robin Program participation and results) that the laboratory's precision is better.

AC = Effective collection area of the filter in square millimeters

V = Air volume sampled in liters

E = Fiber density on the filter in fibers per square millimeter

F/Nf = Total fiber count per graticule field

B/Nb = Mean field blank count per graticule field

Af = Graticule field area in square millimeters

$$\text{TWA} = C1/T1 + C2/T2 = Cn/Tn$$

Where: C = Concentration of contaminant

T = Time sampled.

TABLE 3
 NIOSH METHOD 7400
 PCM ENVIRONMENTAL AIR SAMPLING PROTOCOL (NON-PERSONAL)

Sample Location	Minimum No. of Samples	Filter Pore Size (Note 1)	Min. Vol. (Note 2) (Liters)	Sampling Rate (liters/min.)
Inside Abatement Area	0.5/140 Square Meters (Notes 3 & 4)	0.45 microns	3850	2-16
Each Room in 1 Abatement Area Less than 140 Square meters		0.45 microns	3850	2-16
Field Blank	2	0.45 microns	0	0
Laboratory Blank	1	0.45 microns	0	0

Notes:

1. Type of filter is Mixed Cellulose Ester.
2. Ensure detection limit for PCM analysis is established at 0.005 fibers/cc.
3. One sample shall be added for each additional 140 square meters. (The corresponding I-P units are 5/1500 square feet).
4. A minimum of 5 samples are to be taken per abatement area, plus 2 field blanks.

TABLE 4
 EPA AHERA METHOD: TEM AIR SAMPLING PROTOCOL

Location Sampled	Minimum No. of Samples	Filter Pore Size	Min. Vol. (Liters)	Sampling Rate (liters/min.)
Inside Abatement Area	5	0.45 microns	1500	2-16
Outside Abatement Area	5	0.45 microns	1500	2-16
Field Blank	2	0.45 microns	0	0
Laboratory Blank	1	0.45 microns	0	0

Notes:

1. Type of filter is Mixed Cellulose Ester.
2. The detection limit for TEM analysis is 70 structures/square mm.

CERTIFICATE OF WORKER'S ACKNOWLEDGMENT

PROJECT NAME _____ CONTRACT NO. _____
PROJECT ADDRESS _____
CONTRACTOR FIRM NAME _____
EMPLOYEE'S NAME _____,
(Print) (Last) (First) (MI)

Social Security Number: _____ - _____ - _____,

WORKING WITH ASBESTOS CAN BE DANGEROUS. INHALING ASBESTOS FIBERS HAS BEEN LINKED WITH TYPES OF LUNG DISEASE AND CANCER. IF YOU SMOKE AND INHALE ASBESTOS FIBERS, THE CHANCE THAT YOU WILL DEVELOP LUNG CANCER IS GREATER THAN THAT OF THE NONSMOKING PUBLIC.

Your employer's contract for the above project requires that you be provided and you complete formal asbestos training specific to the type of work you will perform and project specific training; that you be supplied with proper personal protective equipment including a respirator, that you be trained in its use; and that you receive a medical examination to evaluate your physical capacity to perform your assigned work tasks, under the environmental conditions expected, while wearing the required personal protective equipment. These things are to be done at no cost to you. By signing this certification, you are acknowledging that your employer has met these obligations to you. The Contractor's Designated Industrial Hygienist will check the block(s) for the type of formal training you have completed. Review the checked blocks prior to signing this certification.

FORMAL TRAINING:

_____ a. For Competent Persons and Supervisors: I have completed EPA's Model Accreditation Program (MAP) training course, "Contractor/Supervisor", that meets this State's requirements.

b. For Workers:

_____ (1) For OSHA Class I work: I have completed EPA's MAP training course, "Worker", that meets this State's requirements.

_____ (2) For OSHA Class II work (where there will be abatement of more than one type of Class II materials, i.e., roofing, siding, floor tile, etc.): I have completed EPA's MAP training course, "Worker", that meets this State's requirements.

_____ (3) For OSHA Class II work (there will only be abatement of one type of Class II material):
(a) I have completed an 8-hour training class on the elements of 29 CFR 1926, Section .1101(k)(9)(viii), in addition to the specific work practices and engineering controls of 29 CFR 1926, Section .1101(g) and hands-on training.

_____ (b) I have completed EPA's MAP training course, "Worker", that meets this State's requirements.

_____ (4) For OSHA Class III work: I have completed at least a 16-hour course consistent with EPA requirements for training of local education agency maintenance and custodial staff at 40 CFR 763, Section .92(a)(2) and the elements of 29 CFR 1926, Section .1101(k)(9) in addition to the specific work practices and engineering controls at 29 CFR 1926, Section .1101, and hands-on training.

CERTIFICATE OF WORKER'S ACKNOWLEDGMENT

_____ (5) For OSHA Class IV work: I have completed at least a 2-hr course consistent with EPA requirements for training of local education agency maintenance and custodial staff at 40 CFR 763, (a)(1), and the elements of 29 CFR 1926, Section .1101(k)(9)(viii), in addition to the specific work practices and engineering controls at 29 CFR 1926, Section .1101(g) and hands-on training.

_____ c. Workers, Supervisors and the Designated Competent Person: I have completed annual refresher training as required by EPA's MAP that meets this State's requirements.

PROJECT SPECIFIC TRAINING:

_____ I have been provided and have completed the project specific training required by this Contract. My employer's Designated Industrial Hygienist and Designated Competent Person conducted the training.

RESPIRATORY PROTECTION:

_____ I have been trained in accordance with the criteria in the Contractor's Respiratory Protection program. I have been trained in the dangers of handling and breathing asbestos dust and in the proper work procedures and use and limitations of the respirator(s) I will wear. I have been trained in and will abide by the facial hair and contact lens use policy of my employer.

RESPIRATOR FIT-TEST TRAINING:

_____ I have been trained in the proper selection, fit, use, care, cleaning, maintenance, and storage of the respirator(s) that I will wear. I have been fit-tested in accordance with the criteria in the Contractor's Respiratory Program and have received a satisfactory fit. I have been assigned my individual respirator. I have been taught how to properly perform positive and negative pressure fit-check upon donning negative pressure respirators each time.

MEDICAL EXAMINATION:

_____ I have had a medical examination within the last twelve months which was paid for by my employer. The examination included: health history, pulmonary function tests, and may have included an evaluation of a chest x-ray. A physician made a determination regarding my physical capacity to perform work tasks on the project while wearing personal protective equipment including a respirator. I was personally provided a copy and informed of the results of that examination. My employer's Industrial Hygienist evaluated the medical certification provided by the physician and checked the appropriate blank below. The physician determined that there:

- _____ were no limitations to performing the required work tasks.
- _____ were identified physical limitations to performing the required work tasks.

Date of the medical examination _____

Employee Signature _____ date _____
 Contractor's Industrial Hygienist Signature _____ date _____

-- End of Section --

SECTION 13283N

REMOVAL/CONTROL AND DISPOSAL OF PAINT WITH LEAD
02/02

PART 1 GENERAL

The Contractor shall obtain previous lead-based paint (LBP) survey data (AM #0001 the Record of Environmental Consideration) as furnished by the installation environmental office AM #0001 to the Contracting Officer Representative (COR). The Contractor shall contact lead-based paint (LBP) Program Manager at the installation during planning stage of the LBP survey. (Example: A previous data on Building 2639 indicated that it has TCLP lead exceeded 5.0 mg/l). The Contractor shall AM #0001 identify non-metal components that have TCLP lead of 5.0 mg/L or greater, the entire components shall be abated, manifest and dispose as hazardous waste prior to demolition of structure. AM #0001 The Contractor shall remove ACM, and other regulated materials, segregate metal and other construction debris that has no regulated material to salvage facility, to the maximum degree possible, prior to demolishing the structure. Reference Section 01572 for construction and demolition debris management. A composite sample of at least 110 grams shall be obtained from the building demolition debris and analyze for TCLP lead for waste disposal at a permitted landfill.

The list of structures for abatement and demolition shall be verified with DPW and through a site visit.

AM # 0001. AM #0001 At start of work, the Contractor shall perform a complete LBP survey and laboratory analysis in accordance with EP 1110-1-30, Pre-design Asbestos/Lead Survey Standard Scope of Work. Prepare a LEAD HAZARD ABATEMENT PLAN (LHAP). AM #0001 The complete survey and laboratory analysis shall use a baseline to determine which non-metal component shall be further tested for TCLP lead and verify if there is hazardous level of LBP, and subsequently abatement by component removal in its entirety. The (LHAP) shall identify the types & conditions of LBP; floor plans depicts LBP locations; photos of LBP (or LBP components) to be abated; x-ray fluorescent analyzer (XRF) and/or laboratory analytical results (AM #0001 that includes XRF readings and/or Total Lead analytical results, hazardous waste component TCLP lead data, and composite building debris TCLP lead data); inspection field notes; abatement quantity AM #0001 and description; method of abatement; abatement containment layout and details; engineering work practices; (manifest) disposal requirements; name and current permit of AM #001 hauler and disposal facility; worker and environmental protection plan & OSHA monitoring requirements (reference EP 1110-1-29, Lead Hazard Clearance Inspection, Standard Scope of Work). The LEAD HAZARD ABATEMENT PLAN (LHAP) shall be submitted to the USACE Area Office for review and approval. AM #0001 If there is no hazardous level of lead found in the structures to be demolished, but there are some levels of lead on the paint (as determined by EPA Total Lead analysis with EPA SW 846 Method 6010 or x-ray fluorescent analyzer), the LHAP shall discuss, as a minimum the following: engineering work practices, XRF readings and/or Total Lead analytical results, composite building debris TCLP lead data, disposal requirements, name and current permit of disposal facility, worker and environmental protection plan & monitoring per OSHA regulation.

Other submittals shall include the current state permit or license for disposal facility, AM #0001 license for debris hauler, qualifications and current training certifications for Contractor, project supervisor, Contractor's competent person, industrial hygienist, industrial hygiene technician, workers, laboratory qualifications, laboratory current state license, laboratory national accreditation, and other required submittals stated in this section (including SAFETY & HEALTH PROGRAM AND PLAN, EM 385-1-1 Activity Hazard Analysis, etc).

The Contractor shall determine abatement method that is feasible and has the least exposure to workers and the environment in the LHAP.

AM # 0001 If non-metal components that have TCLP lead of 5.0 mg/L or greater are identified, they are to be removed in their entirety prior to total structure demolition. Prior to disposal AM #0001, they shall be analyzed for TCLP lead with EPA SW 846 Method 6010. At least a total of 110 gram (of lead component including paint & substrate or lead containing debris generated by paint abatement) shall be obtained for the TCLP lead analysis. If hazardous level of lead (TCLP Lead result is 5.0 mg/L and greater) is encountered, the hazardous lead component or lead containing debris is manifest for disposal. Containment, packaging, transportation, manifest, disposal of hazardous waste shall comply with applicable Federal and state regulations. The Contractor shall provide to the COR a written statement from the Treatment, Storage, & Disposal (TSD) Facility that it is permitted to receive the hazardous waste stream. All lead containing components

removed for disposal shall be disposed according to the TCLP Lead analytical result and TSD permit allowable limits for lead, and the Contractor shall provide a statement from the TSD to verify waste acceptance.

Typically, XRF or Total Lead (EPA Method 6010) analysis is not performed for metal components. All metal components shall be removed and delivered to a metal salvage facility AM# 0001.

Notification to regulatory agency and manifest to the disposal facility shall be prepared by the Contractor and provided with adequate time for signature from an authorized person at the installation. After completion of abatement, the Contractor shall submit at least three (3) copies of ABATEMENT CLOSURE REPORT to include both worker & environmental monitoring data before and during abatement, final clearance results, abatement AM #0001 and demolition work field records, manifest, disposal receipt from disposal facility, and other documents pertaining to executing work. The Contracting Officer Representative shall provide a copy of Abatement Closure Report to the installation LBP Program Manager. The Contractor shall also retain copies of Abatement Closure Report for future inquiry, if so required from the regulatory authorities.

The Contractor is responsible for all fees (including manifest, notification, training, physical examination, etc. as stated in this section) that is associated with work under this section. Any fines levied by regulatory agencies regarding non-compliance shall be paid by the Contractor. All documents pertaining to work performed shall be kept by the Contractor and the Area Office per regulatory requirements. The Contractor shall comply with Federal, state and local regulations in performing work described in this section. The Contractor shall review this section in its entirety and perform work required. All reference documents are available in <http://synectics.net/resources>

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z88.2 (1992) Respiratory Protection

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1926.21 Safety Training and Education
29 CFR 1926.33 Access to Employee Exposure and Medical Records
29 CFR 1926.55 Gases, Vapors, Fumes, Dusts, and Mists
29 CFR 1926.59 Hazard Communication
29 CFR 1926.62 Lead Exposure in Construction
29 CFR 1926.65 Hazardous Waste Operations and Emergency Response
29 CFR 1926.103 Respiratory Protection
40 CFR 260 Hazardous Waste Management Systems: General
40 CFR 261 Identification and Listing of Hazardous Waste
40 CFR 262 Generators of Hazardous Waste
40 CFR 263 Transporters of Hazardous Waste
40 CFR 264 Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265 Interim Status Standard for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 268 Land Disposal Restrictions
40 CFR 745 Lead; Requirements for Lead-Based Paint Activities

49 CFR 172 Hazardous Materials, Tables, and Hazardous
Materials Communications Regulations
49 CFR 178 Shipping Container Specification

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)

HUD 6780 (1995) Guidelines for the Evaluation and
Control of Lead Based Paint Hazards in
Housing

UNDERWRITERS LABORATORIES INC. (UL)

UL 586 (1996 R 1999) High-Efficiency, Particulate, Air
Filter Units

1.2 DEFINITIONS

1.2.1 Abatement

As applied to target housing and child occupied facilities, "abatement" means any set of measures designed to permanently eliminate lead-based paint hazards in accordance with standards established by appropriate Federal agencies. Such term includes:

- a. The removal of lead-based paint and lead-contaminated dust, the permanent containment or encapsulation of lead-based paint, the replacement of lead-painted surfaces or fixtures, and the removal or covering of lead contaminated soil; and
- b. All preparation, cleanup, disposal, and post-abatement clearance testing activities associated with such measures.

1.2.2 Action Level

Employee exposure, without regard to use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air averaged over an 8 hour period in a work environment.

1.2.3 Area Sampling

Sampling of lead concentrations within the lead control area and inside the physical boundaries, which is representative of the airborne lead concentrations but is not collected in the breathing zone of personnel.

1.2.4 Child Occupied Facility

A building or portion of a building constructed prior to 1978 visited regularly by the same child, 6 years of age or under, on a least two different days within any week, provided each days visit last at least 3 hours and the combined weekly visit last at least 6 hours and the combined annual visit last at least 60 hours. Child occupied facilities may include, but are not limited to day-care centers, preschools and kindergarten classrooms.

1.2.5 Competent Person (CP)

As used in this section, refers to a person employed by the Contractor who is trained in the recognition and control of lead hazards in accordance with current federal, State, and local regulations. A Certified Industrial Hygienist (CIH) certified for comprehensive practice by the American Board of Industrial Hygiene or a Certified Safety Professional (CSP) certified by the Board of Certified Safety Professionals is the best choice.

1.2.6 Contaminated Room

Refers to a room for removal of contaminated personal protective equipment (PPE).

1.2.7 Decontamination Shower Facility

That facility that encompasses a clean clothing storage room, and a contaminated clothing storage and disposal rooms, with a shower facility in between.

1.2.8 Deleading

Activities conducted by a person who offers to eliminate lead-based paint or lead-based paint hazards or to plan such activities in commercial buildings, bridges or other structures.

1.2.9 Eight-Hour Time Weighted Average (TWA)

Airborne concentration of lead to which an employee is exposed, averaged over an 8 hour workday as indicated in 29 CFR 1926.62.

1.2.10 High Efficiency Particulate Air (HEPA) Filter Equipment

HEPA filtered vacuuming equipment with a UL 586 filter system capable of collecting and retaining lead-contaminated paint dust. A high efficiency particulate filter means 99.97 percent efficient against 0.3 micron or larger size particles.

1.2.11 Lead

Metallic lead, inorganic lead compounds, and organic lead soaps.

1.2.12 Lead-Based Paint (LBP)

Paint or other surface coating that contains lead in excess of 1.0 milligrams per centimeter squared or 0.5 percent by weight.

1.2.13 Lead-Based Paint Activities

In the case of target housing or child occupied facilities, lead-based paint activities include; a lead-based paint inspection, a risk assessment, or abatement of lead-based paint hazards.

1.2.14 Lead-Based Paint Hazard (LBP Hazard)

Any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, lead-based paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects.

1.2.15 Paint with Lead (PWL)

Any paint that contains lead as determined by the testing laboratory using a valid test method. The requirements of this section does not apply if no detectable levels of lead are found using a quantitative method for analyzing paint using laboratory instruments with specified limits of detection (usually 0.01%). An X-Ray Fluorescence (XRF) instrument is not considered a valid test method.

1.2.16 Lead Control Area

A system [of control methods] to prevent the spread of lead dust, paint chips or debris to adjacent areas that may include temporary containment, floor or ground cover protection, physical boundaries, and warning signs to prevent unauthorized entry of personnel. HEPA filtered local exhaust equipment may be used as engineering controls to further reduce personnel exposures or building/outdoor environmental contamination.

1.2.17 Lead Permissible Exposure Limit (PEL)

Fifty micrograms per cubic meter of air as an 8 hour time weighted average as determined by 29 CFR 1926.62. If an employee is exposed for more than eight hours in a workday, the PEL shall be determined by the following formula:

$$\text{PEL (micrograms/cubic meter of air)} = 400/\text{No. hrs worked per day}$$

1.2.18 Personal Sampling

Sampling of airborne lead concentrations within the breathing zone of an employee to determine the 8 hour time weighted average concentration in accordance with 29 CFR 1926.62. Samples shall be representative of the employees' work tasks. Breathing zone shall be considered an area within a hemisphere, forward of the shoulders, with a radius of 6 to 9 inches and centered at the nose or mouth of an employee.

1.2.19 Physical Boundary

Area physically roped or partitioned off around an enclosed lead control area to limit unauthorized entry of personnel. As used in this section, "inside boundary" shall mean the same as "outside lead control area but inside the physical boundary."

1.2.20 Target Housing

Housing constructed prior to 1978. It does not include housing for the elderly, or persons with disabilities unless any one or more children age 6 years and younger resides or is expected to reside in such housing.

1.3 DESCRIPTION

1.3.1 Description of Work

Remove/control lead-based / paint with lead in [_____] condition, located [_____] and as indicated on the drawings.

1.3.2 Coordination with Other Work

The contractor shall coordinate with work being performed in adjacent areas. Coordination procedures shall be explained in the Removal/Control Plan and shall describe how the Contractor will prevent lead exposure to other contractors and/or Government personnel performing work unrelated to lead activities.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-03 Product Data

Vacuum Filters; G

Respirators; G

SD-06 Test Reports

sampling results; G

Occupational and Environmental Assessment Data Report; G

SD-07 Certificates

Qualifications of CP; G

Testing Laboratory qualifications; G

[Occupant Notification; G]

[Training Certification of workers and supervisors; G]

[Notification of the Commencement of [LBP] Hazard Abatement; G]

[Third Party Consultant Qualifications; G]

lead-based paint/paint with lead removal/control plan including CP approval (signature, date, and certification number); G

Rental equipment notification; G

Respiratory Protection Program; G

Hazard Communication Program; G

[EPA] [or] [State] approved hazardous waste treatment, storage, or disposal facility for lead disposal; G

Lead Waste Management Plan; G

Vacuum filters; G

[Clearance Certification; G]

SD-08 Manufacturer's Instructions

Chemicals and equipment; G

Materials; G

Material safety data sheets for all chemicals; G

SD-11 Closeout Submittals

Completed and signed hazardous waste manifest from treatment or disposal facility; G

Certification of Medical Examinations; G

Employee Training Certification; G

[Waste turn-in documents or weight tickets for non-hazardous wastes that are disposed of at sanitary or construction and demolition landfills; G]

1.5 QUALITY ASSURANCE

1.5.1 Qualifications

1.5.1.1 Qualifications of CP

Submit name, address, and telephone number of the CP selected to perform responsibilities specified in paragraph entitled "Competent Person (CP) Responsibilities." Provide previous experience of the CP. Submit proper documentation that the CP is trained [and licensed] [and certified] in accordance with Federal, State, and local laws.

1.5.1.2 Training Certification

Submit a certificate for each employee and supervisor, signed and dated by the [authorized] training provider [meeting 40 CFR 745 (Subpart L) requirements], stating that the employee or supervisor has received the required lead training [and is certified to perform or supervise deleading or lead removal]. [Submit proof the work will be performed by a certified firm.]

1.5.1.3 Testing Laboratory

Submit the name, address, and telephone number of the testing laboratory selected to perform the air [and wipe] [and soil] sampling, testing, and reporting of airborne concentrations of lead. Use a laboratory accredited under the EPA National Lead Laboratory Accreditation Program (NLLAP) by either the American Association for Laboratory Accreditation (A2LA) or the American Industrial Hygiene Association (AIHA) and that is successfully participating in the Environmental Lead Proficiency Analytical Testing (ELPAT) program to perform sample analysis. Laboratories selected to perform blood lead analysis shall be OSHA approved.

[1.5.1.4 Third Party Consultant Qualifications

Submit the name, address, and telephone number of the third party consultant selected to perform the wipe sampling for determining concentrations of lead in dust or soil sampling. Submit proper documentation that the consultant is trained and certified as an inspector technician or inspector/risk assessor by the USEPA authorized State (or local) certification and accreditation program.

]1.5.2 Requirements

1.5.2.1 Competent Person (CP) Responsibilities

- a. Verify training meets all federal, State, and local requirements.
- b. Review and approve lead-based paint/paint with lead removal/control plan for conformance to the applicable standards. Ensure work is performed in strict accordance with specifications at all times.
- c. Continuously inspect lead-based paint removal/control work for conformance with the approved plan.
- d. Perform air and wipe sampling.
- e. Control work to prevent hazardous exposure to human beings and to the environment at all times.
- f. Certify the conditions of the work as called for elsewhere in this specification.

1.5.2.2 Lead-Based Paint/Paint with Lead Removal/Control Plan (LBP/PWL R/CP)

Submit a detailed job-specific plan of the work procedures to be used in the removal/control of LBP/PWL. The plan shall include a sketch showing the location, size,

and details of lead control areas, location and details of decontamination facilities, viewing ports, and mechanical ventilation system. Include a description of equipment and materials, controls and job responsibilities for each activity from which lead is emitted. Include in the plan, eating, drinking, smoking and sanitary procedures, interface of trades, sequencing of lead related work, collected waste water and paint debris disposal plan, air sampling plan, respirators, personal protective equipment, and a detailed description of the method of containment of the operation to ensure that lead is not released outside the lead control area. Include site preparation, cleanup and clearance procedures. Include occupational and environmental sampling, training, sampling methodology, frequency, duration of sampling, and qualifications of sampling personnel in the air sampling portion of the plan. Include a description of arrangements made among contractors on multi-contractor worksites to inform affected employees and to clarify responsibilities to control exposures.

[The Removal/Control Plan shall be developed by a certified planner/project designer.]

[In occupied buildings, the Removal/Control Plan shall also include an occupant protection program that describes the measures that will be taken during the work to protect the building occupants.]

1.5.2.3 Occupational and Environmental Assessment Data Report

If initial monitoring is necessary, submit occupational and environmental sampling results to the Contracting Officer within three working days of collection, signed by the testing laboratory employee performing the analysis, the employee that performed the sampling, and the CP.

[In order to reduce the full implementation of 29 CFR 1926.62, the Contractor shall provide documentation. Submit a report that supports the determination to reduce full implementation of the requirements of 29 CFR 1926.62 and supporting the Lead Removal/Control Plan.]

a. The initial monitoring shall represent each job classification, or if working conditions are similar to previous jobs by the same employer, provide previously collected exposure data that can be used to estimate worker exposures per 29 CFR 1926.62. The data shall represent the worker's regular daily exposure to lead for stated work.

b. Submit worker exposure data gathered during the task based trigger operations of 29 CFR 1926.62 with a complete process description. This includes manual demolition, manual scraping, manual sanding, heat gun, power tool cleaning, rivet busting, cleanup of dry expendable abrasives, abrasive blast enclosure removal, abrasive blasting, welding, cutting and torch burning where lead containing coatings are present.

c. The initial assessment shall determine the requirement for further monitoring and the need to fully implement the control and protective requirements including the lead compliance plan per 29 CFR 1926.62.

1.5.2.4 Medical Examinations

Initial medical surveillance as required by 29 CFR 1926.62 shall be made available to all employees exposed to lead at any time (1 day) above the action level. Full medical surveillance shall be made available to all employees on an annual basis who are or may be exposed to lead in excess of the action level for more than 30 days a year or as required by 29 CFR 1926.62. Adequate records shall show that employees meet the medical surveillance requirements of 29 CFR 1926.33, 29 CFR 1926.62, and 29 CFR 1926.103. Maintain complete and accurate medical records of employees for a period of at least 30 years or for the duration of employment plus 30 years, whichever is longer.

1.5.2.5 Training

Train each employee performing paint removal, disposal, and air sampling operations prior to the time of initial job assignment and annually thereafter, in accordance with 29 CFR 1926.21, 29 CFR 1926.62, and State and local regulations where appropriate.

1.5.2.6 Respiratory Protection Program

a. Provide each employee required to wear a respirator a respirator fit test at the time of initial fitting and at least annually thereafter as required by 29 CFR 1926.62.

b. Establish and implement a respiratory protection program as required by ANSI Z88.2, 29 CFR 1926.103, 29 CFR 1926.62, and 29 CFR 1926.55.

1.5.2.7 Hazard Communication Program

Establish and implement a Hazard Communication Program as required by 29 CFR 1926.59.

1.5.2.8 Lead Waste Management

The Lead Waste Management Plan shall comply with applicable requirements of federal, State, and local hazardous waste regulations and address:

- a. Identification and classification of hazardous wastes associated with the work.
- b. Estimated quantities of wastes to be generated and disposed of.
- c. Names and qualifications of each contractor that will be transporting, storing, treating, and disposing of the wastes. Include the facility location [and operator] and a 24-hour point of contact. Furnish two copies of proof of [EPA] [State] [and] [local] hazardous waste [permit applications] [permits] [manifests] [and] [EPA Identification numbers][Transporter Number].
- d. Names and qualifications (experience and training) of personnel who will be working on-site with hazardous wastes.
- e. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment.
- f. Spill prevention, containment, and cleanup contingency measures including a health and safety plan to be implemented in accordance with 29 CFR 1926.65.
- g. Work plan and schedule for waste containment, removal and disposal. Wastes shall be cleaned up and containerized daily. Proper containment of the waste includes using acceptable waste containers (e.g., 55-gallon drums) as well as proper marking/labeling of the containers.
- h. Unit cost for waste disposal according to this plan.

1.5.2.9 Environmental, Safety and Health Compliance

In addition to the detailed requirements of this specification, comply with laws, ordinances, rules, and regulations of Federal, State, and local authorities regarding removing, handling, storing, transporting, and disposing of lead waste materials. Comply with the applicable requirements of the current issue of 29 CFR 1926.62. Submit matters regarding interpretation of standards to the Contracting Officer for resolution before starting work. Where specification requirements and the referenced documents vary, the most stringent requirement shall apply. [The following [local] [and] [State] laws, ordinances, criteria, rules and regulations regarding removing, handling, storing, transporting, and disposing of lead-contaminated materials apply:

- a. [_____]
- b. [_____]
- c. [_____]

[[Licensing] [and certification] in the State of [_____] is required.]

1.5.3 Pre-Construction Conference

Along with the CP, meet with the Contracting Officer to discuss in detail the lead waste management plan and the lead-based paint/paint with lead removal/control plan, including work procedures and precautions for the removal plan.

1.6 EQUIPMENT

1.6.1 Respirators

Furnish appropriate respirators approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services, for use in atmospheres containing lead dust. Respirators shall comply with the requirements of 29 CFR 1926.62.

1.6.2 Special Protective Clothing

Furnish personnel who will be exposed to lead-contaminated dust with proper [disposable] [uncontaminated, reusable] protective whole body clothing, head covering, gloves, and

foot coverings as required by 29 CFR 1926.62. Furnish proper disposable plastic or rubber gloves to protect hands. Reduce the level of protection only after obtaining approval from the CP.

1.6.3 Rental Equipment Notification

If rental equipment is to be used during lead-based paint handling and disposal, notify the rental agency in writing concerning the intended use of the equipment. Furnish a copy of the written notification to the Contracting Officer.

1.6.4 Vacuum Filters

UL 586 labeled HEPA filters.

1.6.5 Equipment for Government Personnel

Furnish the Contracting Officer with [two] [_____] complete sets of personal protective equipment (PPE) daily, as required herein, for entry into and inspection of the paint removal work within the lead controlled area. Personal protective equipment shall include disposable whole body covering, including appropriate foot, head, and hand protection. PPE shall remain the property of the Contractor. The Government will provide respiratory protection for the Contracting Officer.

1.7 PROJECT/SITE CONDITIONS

1.7.1 Protection of Existing Work to Remain

Perform paint removal work without damage or contamination of adjacent areas. Where existing work is damaged or contaminated, restore work to its original condition or better.

PART 2 PRODUCTS

Section 01525N Safety Requirements

PART 3 EXECUTION

3.1 PREPARATION

3.1.1 Protection

3.1.1.1 Notification

a. Notify the Contracting Officer [20] [_____] days prior to the start of any paint removal work.

[b. Occupant Notification

Submit occupant written acknowledgment of the delivery of lead hazard information pamphlet (EPA 747-K-99-001 "Protect Your Family From Lead in Your Home") prior to commencing the renovation work for each affected unit per 40 CFR 745 Subpart E.]

[c. Notification of the Commencement of [LBP] Hazard Abatement

[Submit a copy of the notification of the commencement of [LBP] hazard abatement to [_____] according to the procedures established by [_____.]]

3.1.1.2 Boundary Requirements

a. Provide physical boundaries around the lead control area by roping off the area designated in the work plan or providing curtains, portable partitions or other enclosures to ensure that lead will not escape outside the lead control area.

b. Warning Signs - Provide warning signs at approaches to lead control areas. Locate signs at such a distance that personnel may read the sign and take the necessary precautions before entering the area. Signs shall comply with the requirements of 29 CFR 1926.62.

3.1.1.3 Furnishings

[The Government will remove furniture and equipment from the building before lead-based paint removal work begins.]

[Existing [furniture] [and] [equipment] is lead contaminated, [decontaminate] [dispose of as lead contaminated waste].]

3.1.1.4 Heating, Ventilating and Air Conditioning (HVAC) Systems

Shut down, lock out, and isolate HVAC systems that supply, exhaust, or pass through the lead control areas. Seal intake and exhaust vents in the lead control area with 6 mil plastic sheet and tape. Seal seams in HVAC components that pass through the lead control area. [Provide temporary HVAC system for areas in which HVAC has been shut down outside the lead control area.]

3.1.1.5 Decontamination Shower Facility

Provide clean and contaminated change rooms and shower facilities in accordance with this specification and 29 CFR 1926.62.

3.1.1.6 Eye Wash Station

Where eyes may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes shall be provided within the work area.

3.1.1.7 Mechanical Ventilation System

- a. Use adequate ventilation to control personnel exposure to lead in accordance with 29 CFR 1926.62.
- b. To the extent feasible, use local exhaust ventilation connected to HEPA filters or other collection systems, approved by the CP. Local exhaust ventilation systems shall be evaluated and maintained in accordance with 29 CFR 1926.62.
- c. Vent local exhaust outside the building only and away from building ventilation intakes.
- d. Use locally exhausted, power actuated, paint removal tools.

3.1.1.8 Personnel Protection

Personnel shall wear and use protective clothing and equipment as specified herein. Eating, smoking, or drinking or application of cosmetics is not permitted in the lead control area. No one will be permitted in the lead control area unless they have been appropriately trained and provided with protective equipment.

3.2 ERECTION

3.2.1 Lead Control Area Requirements

[Establish a lead control area by situating critical barriers and physical boundaries around the area or structure where LBP/PWL removal/control operations will be performed.]

[Full containment - Contain removal operations by the use of [critical barriers] [and HEPA filtered exhaust] [a negative pressure enclosure system with decontamination facilities and with HEPA filtered exhaust if required by the CP]. For containment areas larger than 1,000 square feet install a minimum of two 18 inch square viewing ports. Locate ports to provide a view of the required work from the exterior of the enclosed contaminated area. Glaze ports with laminated safety glass.]

3.3 APPLICATION

3.3.1 Work Procedures

Perform removal of lead-based paint in accordance with approved lead-based paint/paint with lead removal/control plan. Use procedures and equipment required to limit occupational and environmental exposure to lead when lead-based paint is removed in accordance with 29 CFR 1926.62. Dispose of removed paint chips and associated waste in compliance with Environmental Protection Agency (EPA), State, and local requirements.

3.3.2 Lead-Based Paint Removal/Control/Deleading

[Manual or power sanding of interior and exterior surfaces is not permitted unless tools are equipped with HEPA attachments or wet methods. The dry sanding or grinding of surfaces that contain lead is prohibited] Provide methodology for LBP removal/control in work plan. Remove paint within the areas designated on the drawings in order to completely expose the substrate. Take whatever precautions necessary to minimize damage to the underlying substrate.

[Avoid [flash rusting][deterioration] of the substrate. Provide surface preparations for painting in accord with Section 09900, "Paints and Coatings."]

Provide methodology for LBP/PWL [removal] [abatement/control] and processes to minimize

contamination of work areas outside the control area with lead-contaminated dust or other lead-contaminated debris/waste and to ensure that unprotected personnel are not exposed to hazardous concentrations of lead. Describe this LBP/PWL removal/control process in the LBP/PWL R/CP. []

3.3.2.1 Indoor Paint Removal

Perform [manual][mechanical][thermal][chemical] paint removal in lead control areas using enclosures, barriers, or containments [and powered locally exhausted paint removal tools]. Collect residue [debris] for disposal in accordance with federal, State, and local requirements.

3.3.2.2 Outdoor Paint Removal

Perform outdoor removal as indicated in federal, State, and local regulations and in the LBP/CPR/CP. The worksite preparation (barriers or containments) shall be job dependent and presented in the LBP/PWL R/CP.

3.3.3 Personnel Exiting Procedures

Whenever personnel exit the lead-controlled area, they shall perform the following procedures and shall not leave the work place wearing any clothing or equipment worn during the work day:

a. Vacuum themselves off.

b. Remove protective clothing in the contaminated change room, and place them in an approved impermeable disposal bag.

[c. Shower.]

[c. Wash hands and face at the site, don appropriate disposable or uncontaminated reusable clothing; move to an appropriate facility; shower.]

d. Change to clean clothes prior to leaving the physical boundary designated around the lead control area.

3.4 FIELD QUALITY CONTROL

3.4.1 Tests

3.4.1.1 Air and Wipe Sampling

Air sample for lead in accordance with 29 CFR 1926.62 and as specified herein. Air and wipe sampling shall be directed or performed by the CP.

a. The CP shall be on the job site directing the air and non-clearance wipe sampling and inspecting the lead-based paint removal/control work to ensure that the requirements of the contract have been satisfied during the entire lead-based paint removal operation.

b. Collect personal air samples on employees who are expected to have the greatest risk of exposure as determined by the CP. In addition, collect air samples on at least 25 percent of the work crew or a minimum of two employees, whichever is greater, during each work shift.

c. Submit results of air samples, within 72 hours after the air samples are taken.

[d. Before any work begins, [a third party consultant shall] collect and analyze baseline wipe [and soil] samples in accordance with methods defined in federal, State, and local standards inside and outside of the physical boundary to assess the degree of dust contamination in the facility prior to lead-based paint removal/control.]

[e. Collect surface wipe samples at a location no greater than 10 feet outside the lead control area at a frequency of once per day while lead removal work is conducted. Surface wipe results shall meet criteria in paragraph "Clearance Certification."]

3.4.1.2 Air Sampling During Paint Removal Work

Conduct area air sampling daily, on each shift in which lead-based paint removal operations are performed, in areas immediately adjacent to the lead control area. Sufficient area monitoring shall be conducted to ensure unprotected personnel are not exposed at or above 30 micrograms per cubic meter of air. If 30 micrograms per cubic meter of air is reached or exceeded, stop work, correct the condition(s) causing the increased levels. Notify the Contracting Officer immediately. Determine if condition(s)

require any further change in work methods. Removal work shall resume only after the CP and the Contracting Officer give approval. For outdoor operations, at least one sample on each shift shall be taken on the downwind side of the lead control area.

3.4.1.3 Sampling After Paint Removal/Control

After the visual inspection, [conduct soil sampling if bare soil is present during external removal/control operations and] collect wipe samples according to the HUD protocol contained in HUD 6780 to determine the lead content of settled dust and dirt in micrograms per square meter foot of surface area [and parts per million (ppm) or for soil].

[3.4.1.4 Testing of Removed Paint and Used Abrasive

Test removed paint and used abrasive in accordance with 40 CFR 261 for hazardous waste.

3.5 CLEANING AND DISPOSAL

3.5.1 Cleanup

Maintain surfaces of the lead control area free of accumulations of paint chips and dust. Restrict the spread of dust and debris; keep waste from being distributed over the work area. Do not dry sweep or use compressed air to clean up the area. At the end of each shift and when the paint removal operation has been completed, clean the area of visible lead paint contamination by vacuuming with a HEPA filtered vacuum cleaner, wet mopping the area and wet wiping the area as indicated by the CP. Reclean areas showing dust or residual paint chips or debris. After visible dust, chips and debris is removed, wet wipe and HEPA vacuum all surfaces in the work area. If adjacent areas become contaminated at any time during the work, clean, visually inspect, and then wipe sample all contaminated areas. The CP shall then certify in writing that the area has been cleaned of lead contamination before restarting work.

3.5.1.1 Clearance Certification

The CP shall certify in writing that air samples collected outside the lead control area during paint removal operations are less than 30 micrograms per cubic meter of air; the respiratory protection used for the employees was adequate; the work procedures were performed in accordance with 29 CFR 1926.62 and 40 CFR 745; and that there were no visible accumulations of material and dust containing lead left in the work site. Do not remove the lead control area or roped off boundary and warning signs prior to the Contracting Officer's acknowledgement of receipt of the CP certification.

[The third party consultant shall certify surface wipe sample results collected inside and outside the work area are [less than 40 micrograms per square foot on floors, less than 250 micrograms per square foot on interior window sills and less than 400 micrograms per square foot on window troughs] [not significantly greater than the initial surface loading determined prior to work].]

[The third party consultant shall certify surface wipe sample results collected inside and outside the work area are less than 200 micrograms per square foot on floors or horizontal surfaces.]

[Certify surface wipe samples are not significantly greater than the initial surface loading determined prior to work.]

[For exterior paint removal/control work, soil samples taken at the exterior of the work site shall be used to determine if soil lead levels had increased at a statistically significant level (significant at the 95 percent confidence limit) from the soil lead levels prior to the work. If soil lead levels do show a statistically significant increase or is above any applicable Federal or State standard for lead in soil, the soil shall be remediated back to the pre-work level.]

[Clear the lead control area in industrial facilities of all visible dust and debris.]

[For lead-based paint hazard abatement work, surface wipe and soil sampling shall be conducted and clearance determinations made according to the work practice standards presented in 40 CFR 745.227.]

3.5.2 Disposal

a. Collect lead-contaminated waste, scrap, debris, bags, containers, equipment, and lead-contaminated clothing that may produce airborne concentrations of lead particles. Label the containers in accordance with 29 CFR 1926.62 and 40 CFR 262. Dispose of lead-contaminated waste material at an [EPA] [or] [State] approved hazardous waste treatment, storage, or disposal facility off Government property.

b. Place waste materials in U.S. Department of Transportation (49 CFR 178) approved

55 gallon drums. Properly label each drum to identify the type of waste (49 CFR 172) and the date the drum was filled. For hazardous waste, the collection drum requires marking/labeling in accordance with 40 CFR 262 during the accumulation/collection timeframe. The Contracting Officer or an authorized representative will assign an area for interim storage of waste-containing drums. Do not store hazardous waste drums in interim storage longer than 90 calendar days from the date affixed to each drum.

c. Handle, transport, and dispose lead or lead-contaminated material classified as hazardous waste in accordance with 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, and 40 CFR 265. Comply with land disposal restriction notification requirements as required by 40 CFR 268.

d. All material, whether hazardous or non-hazardous shall be disposed in accordance with laws and provisions and Federal, State, or local regulations. Ensure waste is properly characterized. The result of each waste characterization (TCLP for RCRA materials) will dictate disposal requirements.

3.5.2.1 Disposal Documentation

Submit written evidence to demonstrate the hazardous waste treatment, storage, or disposal facility (TSD) is approved for lead disposal by the EPA, State or local regulatory agencies. Submit one copy of the completed hazardous waste manifest, signed and dated by the initial transporter in accordance with 40 CFR 262. Contractor shall provide a certificate that the waste was accepted by the disposal facility. [Provide turn-in documents or weight tickets for non-hazardous waste disposal.]

3.5.3 Payment for Hazardous Waste

Payment for disposal of hazardous and non-hazardous waste will not be made until a signed copy of the manifest from the treatment or disposal facility certifying the amount of lead-containing materials or non-hazardous waste delivered is returned and a copy is furnished to the Government.

-- End of Section --